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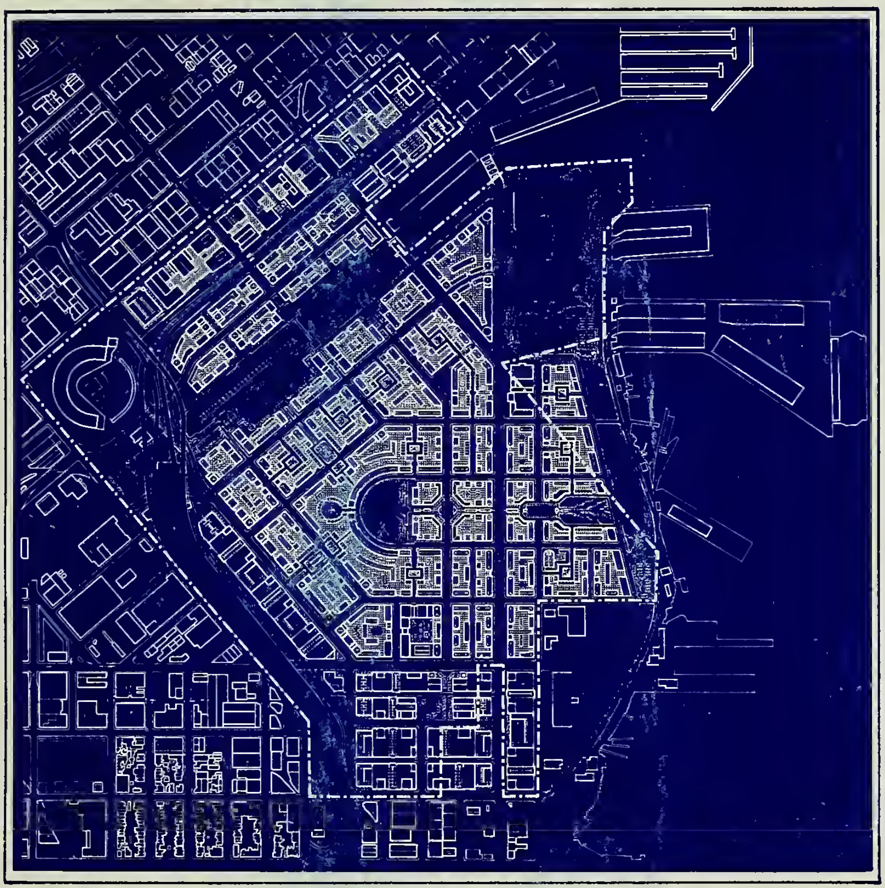

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THE MISSION BAY PLAN

PROPOSAL FOR CITIZEN REVIEW

DEPARTMENT OF CITY PLANNING
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The Mission Bay plan :
proposal for citizen
1987.

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INTRODUCTION

1. Introduction

This is the proposed plan for Mission Bay. The Department of City Planning is submitting this proposal for review and comment to the City Planning Commission, to other officials of the City, and to the residents of the City, the property owners and other affected parties.

Mission Bay encompasses about 300 acres on the eastern shoreline of San Francisco and is under the jurisdiction of the City and County of San Francisco. The plan for this site calls for a new urban neighborhood with an integrated living and working environment, to be built out over the next 20 to 30 years along with a system of parks, recreation and natural resource areas.

This document includes this Introduction; a summary of the site's Background and History in Section 2; Special Planning Considerations in Section 3; Objectives and Policies for Mission Bay in Section 4; a complete description of The Plan in Section 5; and a discussion of Achieving the Plan in Section 6. Section 7 supplies the Development Control Plans and Design Guidelines necessary to ensure the quality of Mission Bay development. The Appendices provide comparable San Francisco examples of plan features and other information.

This plan has been prepared by the San Francisco Department of City Planning with cooperation from Santa Fe Pacific Realty Corporation, the primary landowner, (hereafter, Santa Fe Pacific) and participation by many concerned San Franciscans. It is based on three prior Mission Bay reports prepared in the same manner: (1) the Background and Preliminary Findings Report (November, 1985); (2) the Objectives and Policies statement (September 1986); and (3) Choices for Mission Bay (June 1986). It is also based on information developed in twenty issue-oriented special studies published in September 1986.

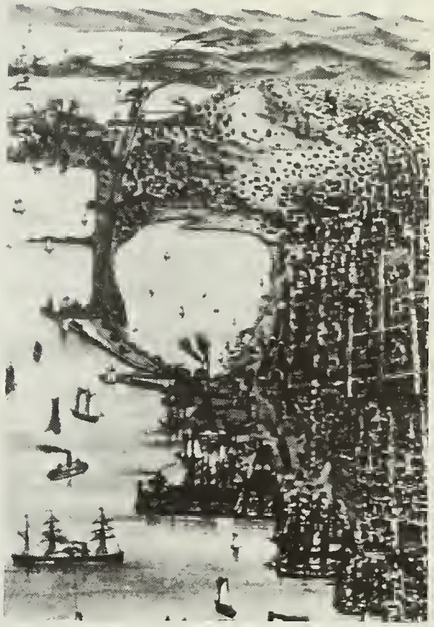
The Department encourages critical review of the plan described in the following pages. All comments will be given careful consideration in conjunction with the analysis of Mission Bay development alternatives in the environmental impact report (EIR) now in preparation, and, as deemed appropriate, changes in the plan will be proposed before it is presented for adoption.

BACKGROUND AND HISTORY

2. Background and History

Mission Bay is a large former railroad yard next to San Francisco Bay bounded by Townsend, China Basin, Mariposa and Seventh Streets (see Figure 1). It includes 170 acres owned by Santa Fe Pacific, 79 acres owned by the City, 41 acres of state lands held in trust by the Port of San Francisco, 3 acres owned by other private parties, and 1 acre owned by Caltrans.

2.1 PHYSICAL CHARACTERISTICS



Most of the site was once a bay forming the mouth of Mission Creek. It has been filled during the past one hundred years, except for China Basin Channel, now the only remaining portion of the original bay. The Channel averages 200-feet wide and ranges from 3 to 15 feet deep with a broad U-shaped bottom. Very little fresh water drains into the Channel which now is predominantly saline. Water quality is poorest at the western end of the Channel because (1) water here is not flushed well by tidal action, and (2) during rainfall periods the storm sewer system periodically overflows into this end of the channel. The Channel is further shaped by sedimentation created by sewage sludge and mud carried in by tidal action.

Sedimentation and the substantial filling of the bay have contributed to the site's soils conditions. Under 3 to 27 feet of fill is bay mud ranging from approximately 40 to 130 feet in depth. Correspondingly, depths to bedrock range from 40 to 240 feet. The groundwater table elevation is encountered between 2 to 7 feet below the ground surface and ground water quality is probably brackish. Areas along the Channel edge are below the 100 year high tide elevation and experience periodic inundation. Geologic and hydrologic conditions suggest that the site might be susceptible to liquefaction during strong seismic shaking, although well-designed development here is expected to sustain low to moderate damage.

No natural vegetation remains although the developed Channel and Bay edges show occurrences of marsh and marine vegetation typical of San Francisco Bay marshes. There may be some foraging in the Channel by fish living bayward of the Third Street Bridge and the Channel edge is currently used by various water and shore birds. Terrestrial birds and animals found on the site include sparrows and mice and other species typical to urban areas.

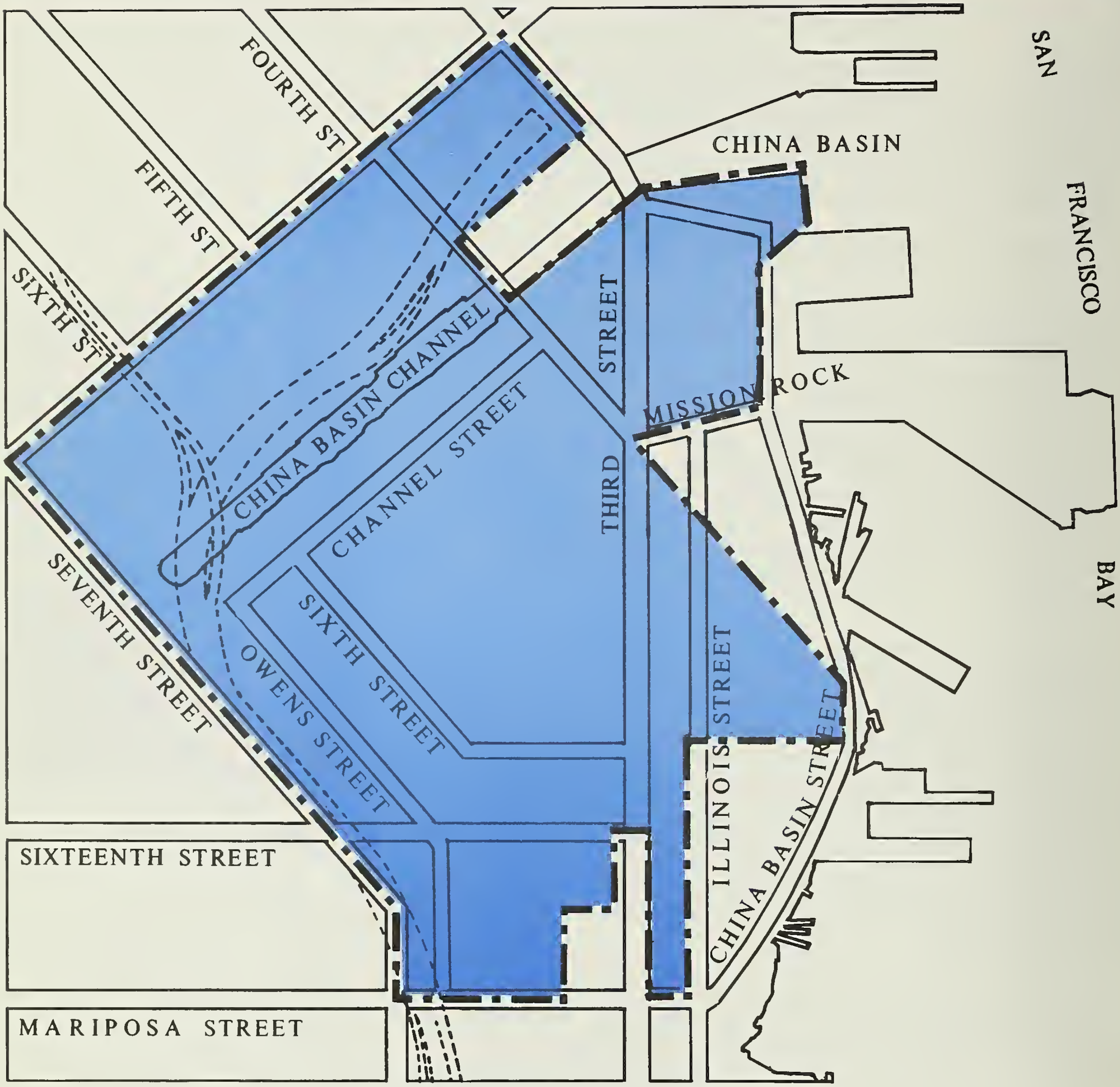
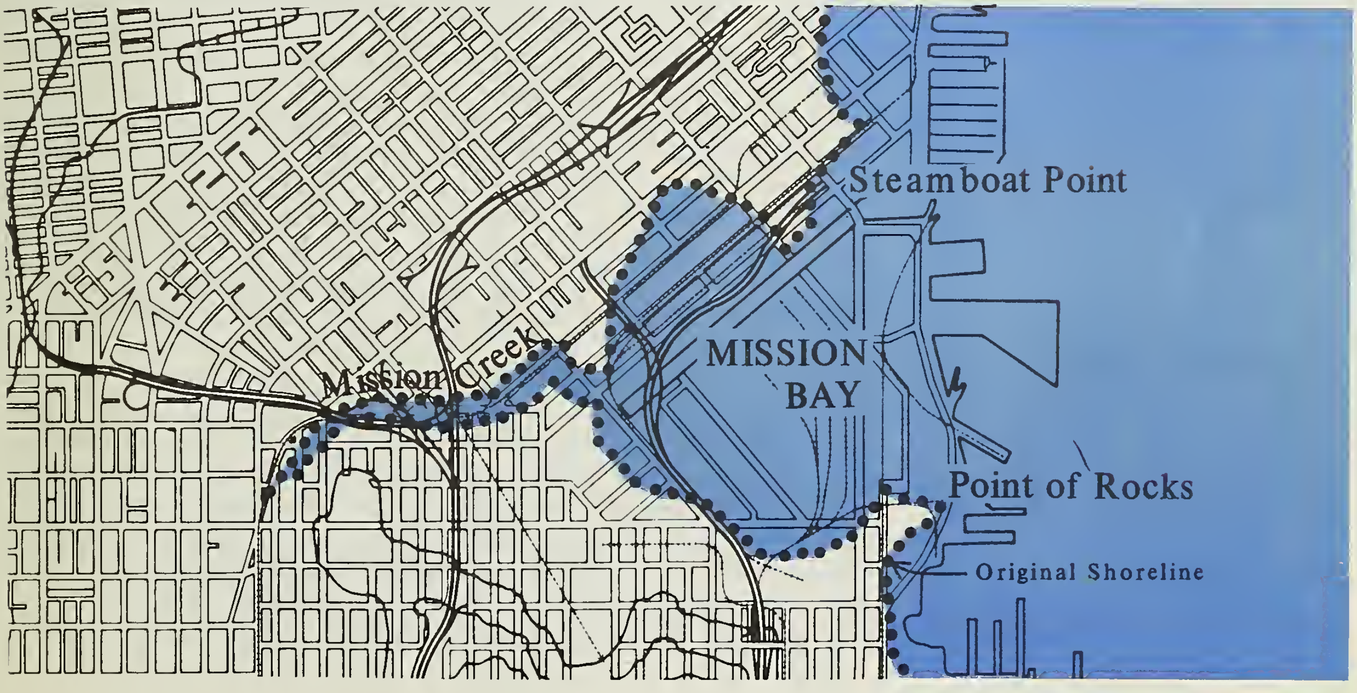

FOURTH ST
FIFTH ST
SIXTH ST
SAN FRANCISCO BAY
CHINA BASIN
STREET
THIRD
MISSION ROCK
CHINA BASIN CHANNEL
CHANNEL STREET
SEVENTH STREET
SIXTH STREET
OWENS STREET
ILLINOIS STREET
CHINA BASIN STREET
SIXTEENTH STREET
MARIPOSA STREET

Figure 1
Mission Bay Site

2.2 SITE HISTORY

The physical changes in the Mission Bay site have occurred primarily over the past one hundred years. For centuries Mission Creek flowed from the Twin Peaks area past Mission Dolores to its outlet at Mission Bay, a shallow 260-acre bay. In the 1850's, an equally extensive swamp ringed the Bay's edge. The Bay and swamp were hospitable vegetative environments for a variety of birds and animals. The creek and bay were navigable and supported a water taxi service which crossed Mission Bay. The bay area was mostly water lots owned by numerous private individuals, the remainder having been claimed in 1850 by the City of San Francisco. At that time, the shoreline was colonized by several enterprises, among them manufacturers of brick who used the local bay clay.

Historic coast survey maps verify that the initial significant incursion into the Bay was Long Bridge, a low-lying wooden structure built around 1865 on 100,000 cubic yards of rock fill. Long Bridge extended from Fourth Street near Brannan Street (Steamboat Point) south to Third Street near Mariposa (Point of Rocks) and accommodated railroad vehicles and streetcars (see Figure 2). Extending from the bridge was a deeper water cattle wharf, 300 feet wide and 100 feet long.



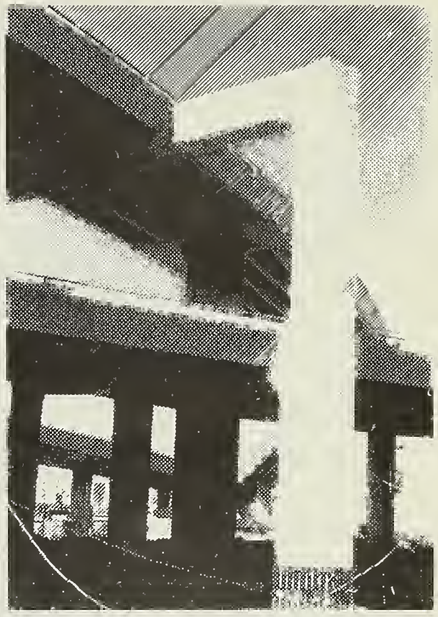
Although Long Bridge was intended as a transportation link between downtown and factories planned to the south, these factories were never built and Long Bridge became a major recreation site. People gravitated to this sunny location to enjoy restaurants, a bath house and a saloon built on piles along the edge of the bridge. The San Francisco Yacht Club located here held its first regatta off-shore nearby. Two rowing clubs on the bridge accommodated other sports enthusiasts. In addition, there was good rock cod fishing from the pier, and productive oyster beds lay inside the Bay.

By 1868, the Southern Pacific and Central Pacific Railroads had purchased most of the privately held water lots in the Bay and through acts of the State Legislature were granted additional Bay acreage. Plans were announced to build a major railroad terminus and yards on this site. In addition to the Southern Pacific terminals and warehouses built in the bay area in 1876, Sixth Street had been extended into the original bay and the city dump was located at its end by 1882. As many as 300 teams of horsedrawn drays arrived daily at what was soon called "Dumpsville." From Channel Street, other finger piers extended into the Bay.

Dumping was accompanied by Mission Bay's use as a sewer. Over half the sewage of the City in the late 1800's flowed into Mission Bay, where it ebbed and flowed with the tides. Mission Creek was described then as "sufficient to sicken" a visitor. "To the outlet in Mission Bay and even beyond it (the Creek) smells to heaven with a loudness and persistence that the strongest nostrils may not withstand, and the disinfectants of a metropolis could not remove." Mission Bay was described as well: "It is a happy circumstance that this Bay is not to the windward of the City, (and) if any one doubt it, let him ride over... on a warm day when the tide is low." ("Hamson & Grunsky Report of July 15, 1893 to Devise and Provide a System of Sewerage for San Francisco" citing Henry Gibbons, Jr. in an official report as Health Officer in 1874).

Despite the cesspool-quality water in the Channel, it was one of the busiest waterfront areas until 1920. Active lumber and millyards, supplying a boom in city growth, received lumber from the Pacific Northwest. Shipyards along the Channel edge built wooden freighters, steam schooners and double-ended ferries. Also, most of the southern side of the Channel was occupied by a hay dock visited by flat-bottomed gaff-rigged hay scows from the Sacramento River Delta. Banana shipments arrived along the Channel next to today's "Banana Triangle," between Third and Fourth Streets.

Gradually Mission Bay was filled to accommodate these many activities with tons of rock and debris from hills leveled to make way for workers' housing on Potrero Hill and from South of Market, Rincon Hill, Nob Hill and Downtown. Dumping and filling was also undertaken to permit construction of plank roads into the Mission District. After the earthquake in 1906, Southern Pacific extended rail spur tracks into the demolished downtown and hauled rubble out of the redeveloping business district for which Mission Bay provided a dumping ground.



The adjacent piers 48, 50 and 64 were built in the early 1920s for general cargo handling; Pier 54 was built in 1909. Pier 50 was built around Mission Rock such that the pier structure covers the rock.

Presently, 36 acres north of China Basin Channel are occupied by Interstate 280 (14 acres) and the Caltrain rail lines and station (22 acres). The remainder is used as commuter daytime parking and the San Francisco Recreational Vehicle Park. Approximately 60 percent of the area south of the Channel is occupied by one or two story industrial buildings, but about half the overall site is underutilized or vacant. Part of the street grid on this site has been developed although most rights-of-way are in disrepair. There is no improved open space on the site except the informally landscaped edge of the Channel near the Mission Creek Harbor Association. There, twenty houseboats and thirty-five recreational boats are berthed at docks between Fifth Street and I-280 on the southern edge of the Channel.

The water quality problems of the late 1800's have eased considerably as the City's sewage system has developed. In recent years the Clean Water Program has carried out various system improvements. While China Basin Channel continues to receive effluent during storm weather (about ten times annually), this storm overflow is now comparable to that from primary sewage treatment. Wildlife species, in particular a variety of both small and spectacular large shorebirds (egrets, blue herons), have returned to the area.

CHINA BASIN

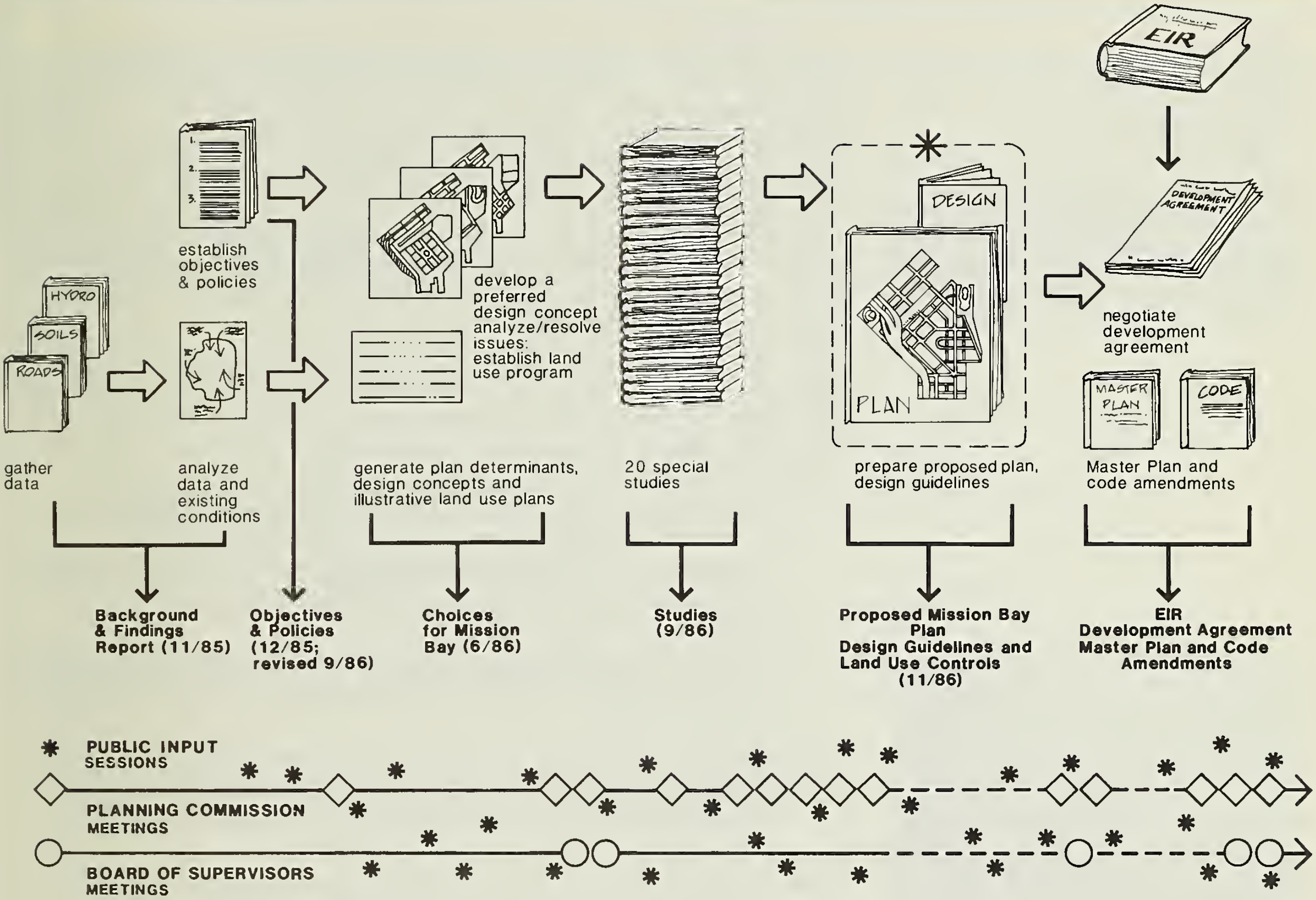
Firehouse Station 19 at 1300 Fourth Street is one of few historic structures on the site. Others include the Third Street (Lefty O'Doul) Bridge, built 1933 and designed by Joseph B. Strauss, chief engineer for the Golden Gate Bridge and the Fourth Street (Peter Maloney) Bridge built between 1916 and 1933. The nearby China Basin Building, built in 1922 for the Del Monte Cannery Company, also has some contextual significance.

2.3 MISSION BAY PLANNING PROCESS

Recent planning for Mission Bay spans a six year period, beginning in 1981 when the Southern Pacific Land Company presented its initial development concept to Mayor Feinstein. Since then much planning has been undertaken, with numerous public forums and discussions about site development issues. Many informed citizens actively participate in the Department's planning process.

The Mission Bay Study began using as reference a letter from Mayor Dianne Feinstein to Southern Pacific Land Company dated October 16, 1984 (hereafter referred to as the Mayor's Letter). In the letter, Mayor Feinstein summarized her position on the scope and guidelines appropriate for development of Mission Bay. Southern Pacific Land Company (now Santa Fe Pacific Realty Corporation) acknowledged agreement with the guidelines. These guidelines included no buildings over eight stories; at least 7,577 residential units of which at least 30% would be affordable (15% financed by the Santa Fe Pacific and 15% financed by the City, average price $125,000); up to 2.6 million square feet of research and development space; up to 4.1 million square feet of office space; up to 200,000 square feet of retail space; parks, lagoons, canals, waterways and public open spaces; no impairment of rail access to businesses and Port facilities; relocation of the Caltrain station to Seventh and Channel, while retaining a right-of-way to downtown; a Muni Metro extension to Sixteenth Street; a 19-acre park on Port property; and various other provisions. Land uses and site improvements including open space were identified on a map attached to the Mayor's material. A second letter from the mayor in May 1986 added a ballpark with approximately 42,500 seats at Seventh and Townsend Streets, a 500-room hotel and 124 additional housing units.

In May 1985, the San Francisco Department of City Planning initiated the planning process (see facing page) to prepare an "implementable development plan for a mixed use Mission Bay community" (Mission Bay Study, Request for Qualifications, May 28, 1985). The Department and its consultants began working with community and city-wide representatives, other governmental agencies and Santa Fe Pacific, the landowner, to prepare (1) objectives and policies; and (2) a preferred development plan. In order to achieve a plan which represented a consensus among interested parties to the extent possible, this interactive process involved dialogue, meetings, exchange of information, public forums, environmental impact report scoping, small issue-oriented group meetings, and open design studio hours where the public could view and respond to ongoing planning and design.


HYDRO
SOILS
ROADS
gather data
establish objectives & policies
analyze data and existing conditions
develop a preferred design concept analyze/resolve issues: establish land use program
generate plan determinants, design concepts and illustrative land use plans
20 special studies
DESIGN
PLAN
prepare proposed plan, design guidelines
EIR
DEVELOPMENT AGREEMENT
negotiate development agreement
MASTER PLAN
CODE
Master Plan and code amendments
Background & Findings Report (11/85)
Objectives & Policies (12/85; revised 9/86)
Choices for Mission Bay (6/86)
Studies (9/86)
Proposed Mission Bay Plan Design Guidelines and Land Use Controls (11/86)
EIR Development Agreement Master Plan and Code Amendments
PUBLIC INPUT SESSIONS
PLANNING COMMISSION MEETINGS
BOARD OF SUPERVISORS MEETINGS

The Mission Bay Clearinghouse, an information network of about 40 participating community organizations, has taken a lead role within the community working with the Department on the public participation process and planning work. Other organizations such as the Mission Creek Conservancy, Community Development Council and the Mission Bay Consortium have formed around Mission Bay issues. Other already established organizations have been very active, including the Mission Creek Harbor Association, San Francisco Tomorrow, Coalition for San Francisco Neighborhoods, Potrero League of Active Neighbors, Potrero Hill Community Development Corporation, Council of Community Housing Organizations, San Franciscans for Reasonable Growth, Community Design Center, South of Market Planning Alliance, American Institute of Architects/San Francisco Chapter, Audubon Society/Golden Gate Chapter, and San Francisco Planning and Urban Research Association. The involvement of these and other groups has helped the process by bringing many different points of view to the planning analysis.

About 1200 organizations, agencies and individuals are on the mailing list to receive the frequently disseminated information about Mission Bay. Periodic meetings have been held with these groups and various documents have been available for review while still in draft form. In addition, meetings of the City Planning Commission have focused on interim reports, including a series of special studies that address about twenty critical planning and design issues. The Board of Supervisors has held hearings before accepting funding from Santa Fe Pacific. The Board also heard periodic progress reports.

The preceding figure, in addition, depicts the planning process products. These reports all contributed to this plan as noted below.

- The Background and Preliminary Findings Report (November 1985) summarized the existing physical conditions, planning considerations, existing principles and objectives, and site opportunities and constraints.

- Objectives and Policies (December 1985, revised September 1986) established Mission Bay planning guidelines following citizen review.

- Choices for Mission Bay (June 1986) set forth basic plan determinants, land use program alternatives and plan concepts.

- The 20 Special Studies (September 1986) developed additional data and analyzed concepts of the Choices document. The focus of each study is described below.

  Container Terminal Options - technical feasibility analysis of a container terminal at Mission Bay and elsewhere in the Central Waterfront.

  Noise Buffering - acoustical constraints and buffering solutions.

  Caltrain Station Locations - impacts on Caltrain patronage of alternative end of the line station locations.

  Muni Metro Configuration - implications of adjacent land use and circulation systems on alternative corridor routes.

  Transportation Network - capability of alternative contemplated street and transportation systems.

Existing Land Uses/Employment - existing uses on the site and survey of existing businesses.

Economic Base/Employment Opportunities - employment opportunities of alternative land uses.

Commercial Building Prototypes - characteristics of office, retail, service/light industrial/R & D and wholesale/showroom building prototypes.

Retail Demand - estimated demand for various amounts and types of retail space.

Housing Mix/Finance/Building Prototypes - evaluation of and guidance regarding appropriate nature and amount of housing.

Jobs/Housing Relationship - estimates of the balance between jobs and housing and net housing contributions.

Canal System - design opportunities and constraints in creating a saltwater canal system.

Wetlands/Playfields - evaluation of alternative wetland sites, their wildlife value and impact on surroundings; schematic design.

Soil Conditions - soil conditions and their effects on location and scale of development and construction cost variables.

Seismic Safety - preliminary assessment of potential seismic hazards; means of minimizing risks.

Community Services/Cultural Facilities - projected needs for community cultural facilities; associated job generation.

Infrastructure Costs - estimates of infrastructure costs for plan alternatives.

Sewage Overflow Options - conditions, causes and solutions to overflows in China Basin Channel.

Economic Feasibility - evaluation of land value, investments, returns and residual value of alternative plans in Choices.

This report provides a proposed plan for the site, with design guidelines to shape development. It contains objectives and policies and land use controls that, following public review and environmental analysis, can be incorporated into the Master Plan and the City zoning statutes. During this next period of public review of the plan, the Department will draft formal amendments to the Master Plan, City Planning Code and Zoning Map, refine the implementation program, prepare an environmental impact report and negotiate a development agreement between the City and Santa Fe Pacific. The development agreement negotiations will address many aspects of this plan. These steps are described further in Section 6.

This plan is the product of many expert resources, including planners, architects, landscape architects, transportation planners, engineers, hydrologists, wetlands ecologists, and economists. It reflects the most current information about site, development feasibility and city needs. It has been in preparation for 18 months, and represents a thorough evaluation of Mission Bay's potential and its limitations.

SPECIAL PLANNING CONSIDERATIONS

3. Special Planning Considerations

Several special considerations have shaped the planning of Mission Bay. They are described in this section.

Mission Bay is one of the few relatively undeveloped areas of San Francisco. Its vacant railroad yards contrast sharply with nearby areas. The new Mission Bay must be compatible with its neighbors. The city prizes--and wants to keep--the South of Market's (SOM) diversity. Current SOM zoning proposals call for a Service/Secondary Office District (SSO) of office, night-time entertainment, service and light industrial activities on Townsend Street abutting Mission Bay. Showplace Square has established its eminence as a design center. The Showplace Square Association has developed zoning recommendations which the Department will consider as part of a future planning study for the area. Potrero Hill, like most other San Francisco neighborhoods, can accommodate more housing only by infill. Its residential area is separated from Mission Bay by Interstate Freeway 280 and a strip of industrial uses which extends into the North Potrero Hill industrial area. The Lower Potrero Hill industrial and residential area is maintaining its present form, with industry next to Mission Bay and most of its housing clustered near a retail area several blocks removed. Mission Bay needs to be linked to these neighboring areas by its street grid and transit lines. The uses at the edges of Mission Bay need to be compatible with the abutting uses in the adjacent areas.

The more than 130 acres of vacant or under used lands within Mission Bay reflects changing economic conditions, particularly the decline in the City's industrial and rail activities. However, the decline of these uses within Mission Bay gives the City a valuable land resource. Mission Bay can continue to offer employment opportunities as it has in the past. It can also provide land to help the City meet other citywide needs.

The first priority among current needs is housing to serve the City's diverse population. A new neighborhood at Mission Bay can have parks along the waters of both China Basin Channel and the Bay, and a variety of employment opportunities for residents within the neighborhood and others in the City. Such commercial development can both diversify the City's economic base and enhance the feasibility of Mission Bay's overall development. In addition, the City should facilitate the Port's maritime growth, link Mission Bay planning with the Caltrain Peninsula Commute Service, and accommodate a new Giant's baseball park, should that be desired. These planning considerations are discussed in this section.

PLANNING MISSION BAY AS A NEIGHBORHOOD FOR BOTH HOUSING AND JOBS

San Francisco is a very diverse, cosmopolitan city. Its minority population is becoming a majority, and the City continues to be a major immigration destination for people of the Pacific Rim and Latin America. As the center of the Bay Area, San Francisco has many mixed use high-density areas, a wide variety of urban experiences, and a unique culture and spirit.

The City greatly benefits from its heterogeneous character. Many of its neighborhoods are a blend of races and ethnic groups. Mission Bay through its size, density and diversity of uses can offer a wide mix of housing types and prices. It can provide employment opportunities to its residents close at hand, within the neighborhood as well as within industrial areas to the south and the more commercial areas to the north.

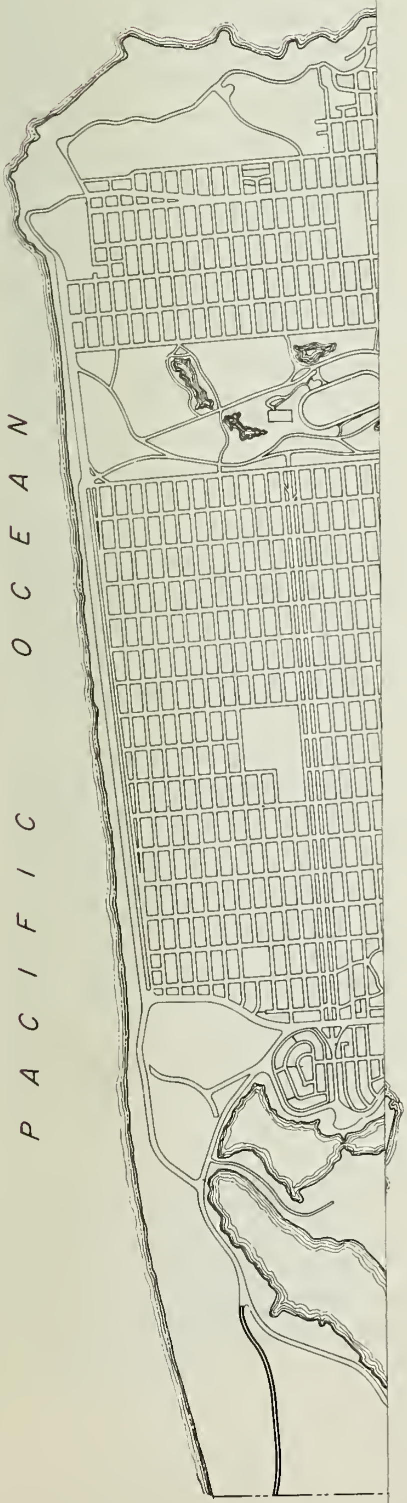
Many vital and intense residential areas in San Francisco are characterized by a mix of uses. Many are identified by their shopping street, such as the Mission, the Castro and Polk Gulch. Other streets such as Union, Chestnut, Clement, Twenty-Fourth and Irving are streets considered synonymous with their neighborhoods. Some neighborhoods have commercial functions virtually throughout, such as Chinatown, North Beach, North of Market and South of Market. Mixed uses are traditional to San Francisco's character, especially in dense neighborhoods. The mix provides a permanent population with shopping and dining, and cultural activities and entertainment, from morning to night.

Mission Bay should address the City's acute housing demand. Housing vacancy rates are low and prices very high. Recently much of the housing construction in the City has been infill development in established residential neighborhoods, sometimes at the cost of existing housing. Opportunities for housing at Mission Bay should be considered in light of City needs. The Residence Element of the Master Plan established a goal of 2,000 units per year through 1990. The Residence Element identified Mission Bay as the housing opportunity site with the greatest potential for adding substantially to the housing supply.

Mission Bay can be another uniquely San Francisco place, a dense, active neighborhood close to downtown, respectful of traditional city patterns. Commercial development in Mission Bay can provide workplaces for residents, and additional retail, open space and cultural opportunities for residents to enjoy. Development ranging from three to eight stories will provide a desirable urban

Mission Bay and Its Neighbors

Mission Bay

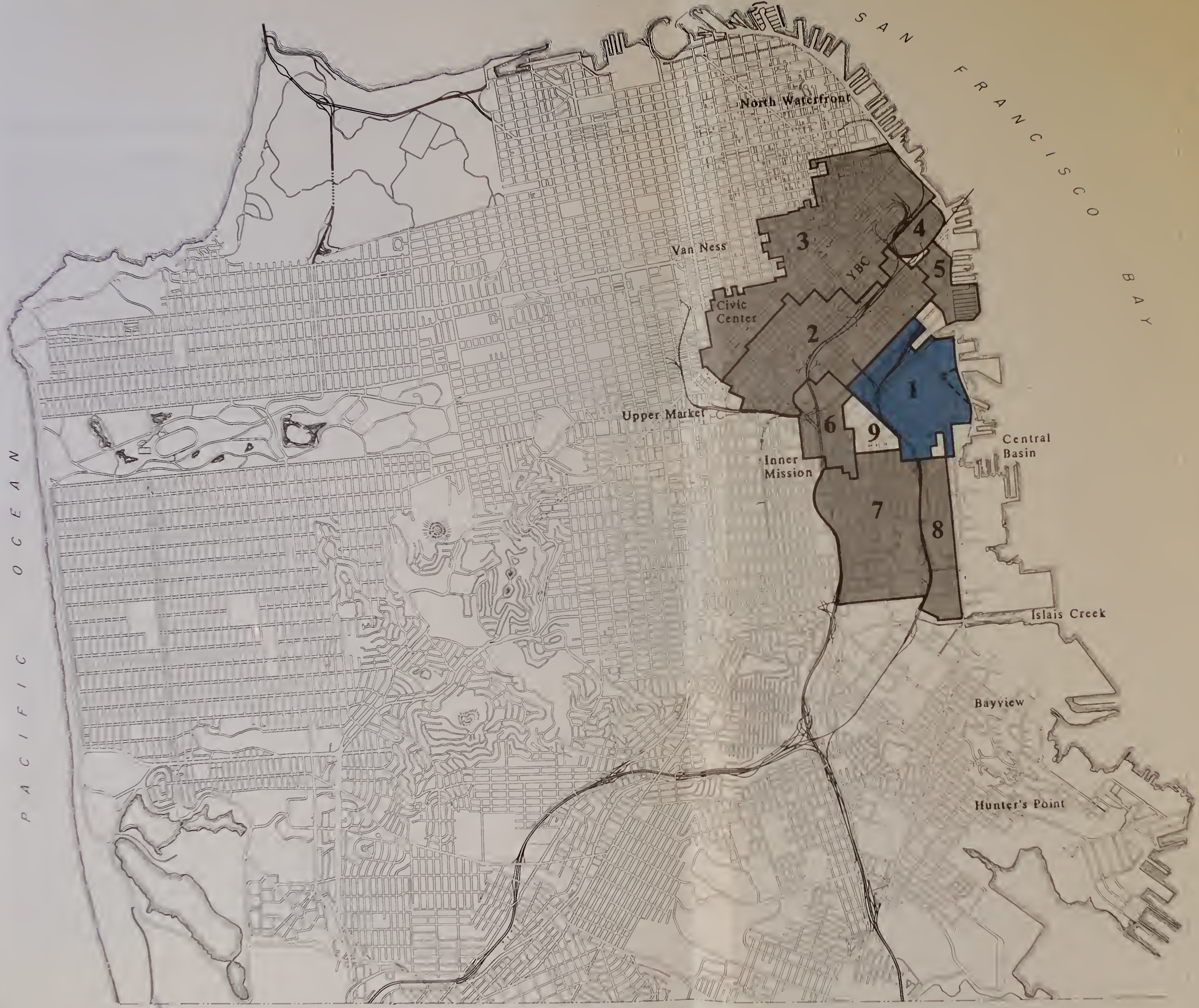


1 Mission Bay
2 South of Market
3 Downtown C-3
4 Rincon Hill
5 South Beach
6 Showplace Square
7 Potrero Hill
8 Lower Potrero Hill
9 North Potrero Hill

NORTH

Figure 2

Mission Bay and Its Neighbors


SAN FRANCISCO BAY
PACIFIC OCEAN
North Waterfront
Van Ness
YBC
Civic Center
Upper Market
Inner Mission
Central Basin
Islais Creek
Bayview
Hunter's Point
1
2
3
4
5
6
7
8
9

1 Mission Bay
2 South of Market
3 Downtown C-3
4 Rincon Hill
5 South Beach
6 Showplace Square
7 Potrero Hill
8 Lower Potrero Hill
9 North Potrero Hill

Figure 2

character without expanding the City's core area of taller buildings within downtown and its immediate surroundings.

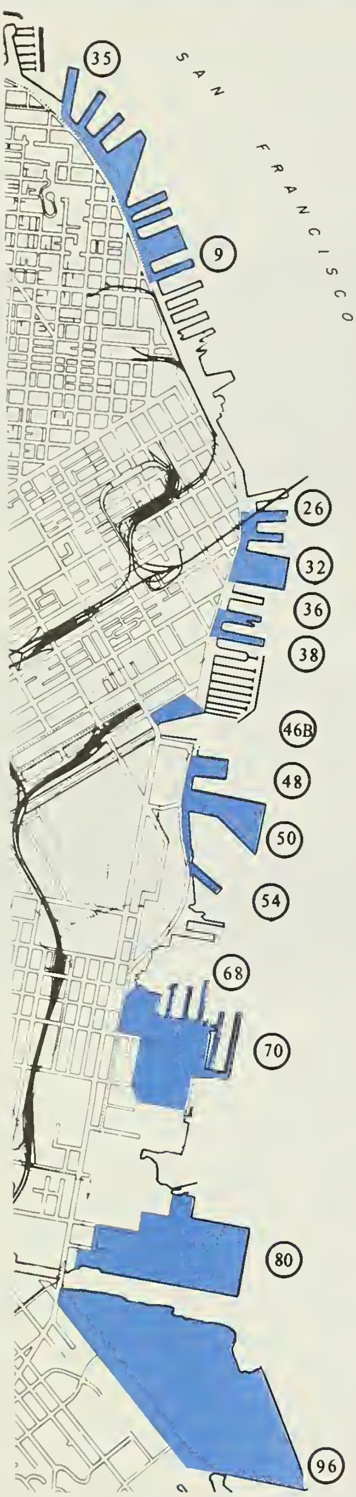
Mission Bay should not create a second downtown to compete with the financial district. Rather, it should provide the City with a suitably sized area for secondary office space to compete with suburban locations. In recent years many "back office" or secondary office functions of large businesses have relocated to lower rent suburban locations. The loss of major corporate back office functions to the suburbs, as well as the loss of other firms not needing a downtown location, has both pulled at the City's economic underpinnings and hurt San Francisco workers and businesses. The lost employment reduces City tax revenues. The relocated jobs force San Franciscans holding these jobs to either commute at their own expense, move to the suburbs or find other work. As these relocated jobs are generally entry-level, San Francisco's less well off citizens suffer disproportionately through their shift. Recent high vacancy levels and lower rents in primary office space downtown have stemmed this exodus, but over time these pressures may continue.

Research and development has largely bypassed San Francisco. Mission Bay is one of the few areas in the city with sufficient land for enterprises of this nature. Bio-tech may offer a special opportunity for San Francisco, in conjunction with the University of California San Francisco Medical School and other medical institutions, to find its niche in a new growth industry.

MAGAZINE AND
BOOK DIVISION

Other service and light industrial development would also be desirable. Apparel manufacturing or distribution, printing, a variety of business and professional services, showrooms and wholesale facilities are all possible and appropriate at Mission Bay. The creativity and diversity of South of Market enterprises or those of other San Francisco districts could generate entrepreneurial activity that could extend to Mission Bay and further the City's economic growth. Such industries require different job skills and allow for more diversity in the labor pool. They give people a chance to develop skills in potential new growth areas of the economy where careers can be made by those beginning at the bottom rung.

These types of employment activities would benefit by the proximity of Mission Bay to downtown San Francisco and the excellent transit and roadway connection to Mission Bay. Mission Bay offers sufficient land to accommodate both office uses and new industrial development. It enables the City to compete with suburban locations, and do so without disrupting established neighborhoods.



EXPANDING THE PORT IN THE CENTRAL WATERFRONT

Bay Area ports compete with other West Coast ports at Los Angeles/Long Beach, Seattle and Vancouver. Ports to the north of the Bay Area have some competitive advantages with respect to local tax subsidies, aggressive railroad agreements and closer sailing time outbound to the Far East. Ports to the south have a much greater consumer base and direct, all weather rail linkages to the midwest. The Bay Area has the advantage of balanced imports (consumer goods) and exports (agricultural products).

Within the Bay Area, the Port of Oakland has led the way in container terminals, and still handles about 85-90% of that cargo. More efficient low cost operations have helped the Port of San Francisco to compete more successfully in recent years, with about 10-15% of the total cargo. The City has a clear advantage with deep water for larger ships. However, up to now federal dredging has allowed Oakland to compete without having to pay its dredging costs.

The Port of San Francisco's maritime operations span the Northern, Northeastern and Central Waterfronts. Its active maritime operations begin with the fishing fleet at Fisherman's Wharf, extend from the passenger terminal at Pier 35 to the tugboat dock at Pier 9, and include Pier 26 at the Bay Bridge to Pier 32, Piers 36 and 38, and Pier 46B on the north side of China Basin Channel. Opposite Mission Bay south of the Channel are active Piers 48, 50 and 54. A bit further south are the Todd Shipyards at Pier 68, the automobile import terminal at Pier 70, and finally the Pier 80 through 96 container terminal complex.

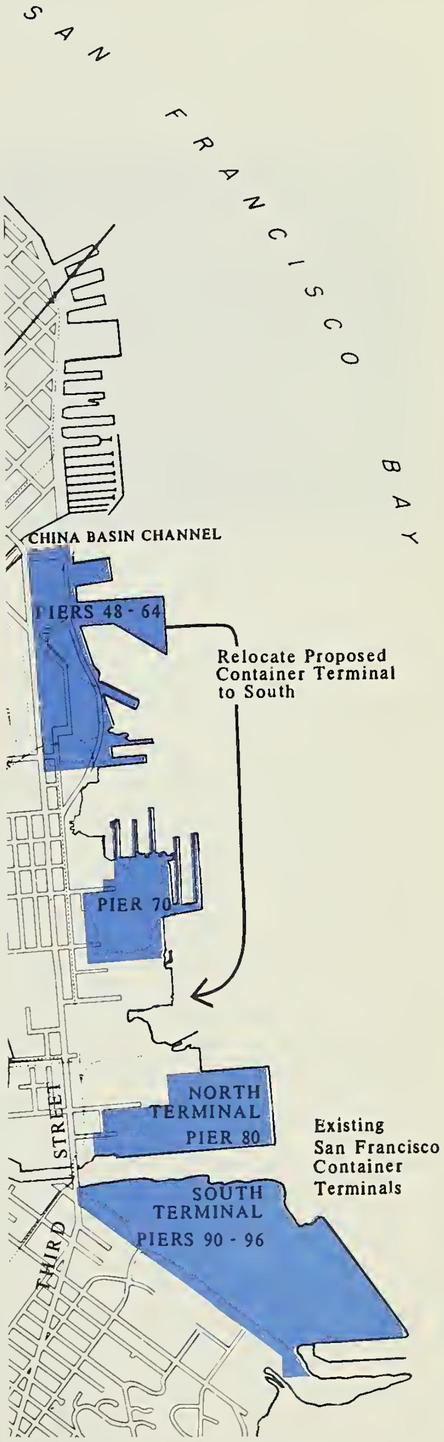
The Metropolitan Transportation Commission (MTC) and Bay Conservation and Development Commission (BCDC) Seaport Plan looks at Bay Area needs for cargo handling. The Plan forecasts cargo through 2020, and designates near-term and long-term container terminal sites. The Plan states that, assuming the near-term sites designated will be developed as active terminals, cargo projected for the Bay Area can be accommodated to at least the year 2000 and probably beyond. Further, long-term sites plus the near-term should accommodate demand beyond 2000 and possibly through 2020. Cargo handling in the Bay Area has not increased as fast as projected in the four years since the Seaport Plan was adopted, and its forecasts of cargo growth now seem overly optimistic.

The Port of San Francisco competes in six markets, and holds the major Bay Area share of four of these (fishing, passengers, newsprint, ship repair, autos and containers). One objective of the Port's maritime development strategy is further development of its container markets. Presently, the Port plans to modernize facilities at Pier 80 through 96 in stages. The Port has expressed an interest in acquiring land immediately north of its North terminal (Pier 80) that is presently owned by Upland Realty Corporation (Upland). This land is not now designated in the Port's maritime expansion plans, but is designated in the BCDC/MTC Seaport Plan for a future container terminal. Pier 70 is also designated in the Seaport Plan as a future container terminal facility. Further, and of great significance to Mission Bay planning, the Port's existing master plan calls for replacing present maritime uses at Piers 48, 50 and 54 with a new container terminal facility. This portion of the Mission Bay site east of Third Street is designated as a near-term terminal by the Seaport Plan, as well as by the Port's master plan. It is also designated as a port priority area in the Seaport Plan.

Port staff is expected to recommend to the Port Commission several important changes to existing policy and as a consequence, the Mission Bay plan proposes a major alteration to the Port's master plan. Recent study indicates that a consolidated facility, including and/or spanning the privately held lands between Pier 80, the Upland property and Pier 70, offers the Port significant advantages for expansion, with no loss in cargo capacity compared to the present master plan. The Mission Rock terminal now proposed for development as a container facility would be very costly because large amounts of Bay fill are required in extremely deep water. In addition, the facility would be difficult to configure due to the location of Mission Rock, the substantial rock formation anchoring the present pier.

A two-berth, 80-acre consolidated terminal expected to be recommended by the Port staff between Piers 70 to 80 would cost less, require less Bay fill, and have a more direct rail connection than separate terminals at Pier 70 and Piers 48 to 54. The consolidated terminal could achieve greater operational efficiencies through sharing cranes, back land and other facilities. It would have to be built around and accommodate existing PG&E operations at the Potrero Power Plant. The terminal would be served by new I-280 ramps at Evans Avenue, thus substantially reducing Port-generated truck traffic on Third Street to the south.

On the other hand, such a land exchange is a complicated and lengthy process requiring approval by many agencies, including the ultimate determination by the State Lands Commission that it is in the interest of the Port and of the State. The Port staff have consistently emphasized that their support for any exchange of


SAN FRANCISCO BAY
CHINA BASIN CHANNEL
PIERS 48 - 64
Relocate Proposed Container Terminal to South
PIER 70
NORTH TERMINAL PIER 80
SOUTH TERMINAL PIERS 90 - 96
Existing San Francisco Container Terminals
THIRD STREET

land and redesignation of a new container terminal expansion site is conditioned upon the ability to assemble the land between Piers 70 and 80 and to successfully conclude all the negotiations and effect the actual exchange. In any event, the Port would have to continue to hold the Mission Rock terminal plans in reserve pending the successful conclusion of all exchange logistics.

San Francisco's natural deep water advantage may become more significant over the years. This was a factor in the Port's input to the Seaport Plan, which assumed San Francisco could achieve a 25% share of the Bay Area cargo handling. The consolidated container terminal now being considered between Piers 70 and 80 could theoretically achieve a cargo throughput capacity virtually equal to the cargo now handled by all Bay Area container terminals. The Port's existing container facility at Piers 90 to 96 presently operates below capacity. After modernization and expansion it could handle about half the cargo of the consolidated Piers 70 to 80 complex. San Francisco, by modernizing its present facilities and adding the consolidated facility, could handle about one and one-half times the cargo now going to all Bay Area ports. The Port of San Francisco with facilities at Piers 70 to 80 and at Piers 90 to 96 should have ample capacity available for foreseeable cargo handling needs.

To make the new container facility possible, Port staff has indicated their preference to exchange land the Port owns near Piers 48 to 54 for land adjacent to Pier 80, the area now considered more desirable for future Port container development. This land transfer would help the Port achieve its maritime objectives. It would also help the City achieve maximum recreational use of one of the warmest shorelines in the City, in conjunction with a new neighborhood at Mission Bay. The plan is premised on the assumption that these lands can be exchanged, providing both maritime and recreational benefits to the City. It is further conditioned on the concerns and prerequisites of the Port as outlined above and in the anticipated staff report on this subject (January 1987). To assist public discussion of this issue, a variation to the plan maintaining the container terminal off Pier 50 is also presented in the report.

The relocation of the Port's container terminal to the Pier 70 and 80 area would require converting the present Warm Water Cove fishing and picnic area to maritime use. However, it would free up a significant expanse of Bay shoreline in the Mission Bay area, totaling about two linear miles when combined with the China Basin Channel parks, plaza and promenades.

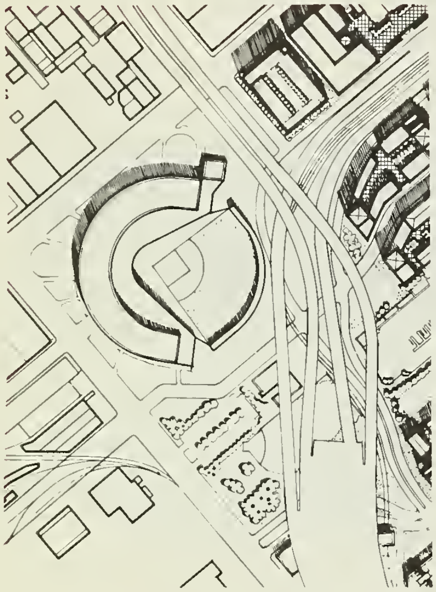
LINKING CALTRAIN SERVICE AND MISSION BAY

Mission Bay is the present San Francisco terminus for the Caltrain Peninsula Commute Service, which extends down the Peninsula to San Jose. Caltrans operates the Caltrain under an agreement with Southern Pacific Transportation Company (SP). The agreement runs through 1990. By that time, Caltrans anticipates turning the Peninsula Commute Service over to a joint powers authority consisting of San Francisco, San Mateo and Santa Clara Counties. The Metropolitan Transportation Commission (MTC) hopes to facilitate the formation of such a body. Negotiations are underway with the railroad regarding the location of the current Caltrain Terminal and other stations along the commute route.

The San Francisco terminus will clearly be an important factor in these discussions. The City and Caltrans policy is to extend Caltrain downtown, and San Mateo and Santa Clara Counties share that desire. Santa Fe Pacific has agreed to provide a right-of-way through Mission Bay to downtown. However, it wishes to develop the present station lands and trackage east of I-280, although not in the initial phases of development. The plan proposes an interim station location at Seventh and Channel Streets if a downtown extension cannot first be achieved, as the interim station allows more developable land in Mission Bay, meaning more housing, open space and economic and employment opportunities. It would also open both vehicular and pedestrian connections between the South of Market and China Basin Channel open space. It keeps the train under the freeway when it is not underground, perhaps the most appropriate location for heavy gauge trains in an urban area, considering their noise and street blocking proclivities.

City policy is to extend Caltrain downtown. If an interim station is required before the extension can be accomplished, it must be developed as an intermodal transit center well-served by Muni Metro and other transit lines to keep Caltrain patronage at or near present levels. The joint powers authority will negotiate with the railroad to achieve the overall Peninsula Commute System needed to make this service a success. A program for the downtown extension requires substantial additional work. It will involve all the agencies and jurisdictions already mentioned, as well as the California Transportation Commission and Public Utilities Commission, and Federal Urban Mass Transportation Administration.

ACCOMMODATING A BALLPARK AT MISSION BAY



The search for a downtown ballpark for the San Francisco Giants has narrowed to one site, at Seventh and Townsend Streets within Mission Bay. Many other sites have been analyzed and discussed, and this appears to be the last opportunity for an alternative to Candlestick Park in San Francisco.

Mission Bay can accommodate such a use with modest changes to the overall plan. The plan illustrates how the site can be designed for a ballpark if that is the ultimate decision. The plan also shows how the site could be used should the ballpark project not proceed.

OBJECTIVES AND POLICIES FOR MISSION BAY

4. Objectives And Policies For Mission Bay

The objectives and policies of this section take into account the site, its setting within the City and Region, and the needs of the City. They have shaped the design character and amenities in the plan and will guide its implementation through design guidelines. They have guided the type and range of land uses appropriate for this site. Similarly, they will guide the City and project sponsor in establishing and maintaining the social and economic components of the plan. They have been revised after extensive public review, and will be incorporated as amendments to the Central Waterfront Plan following further refinement.

URBAN DESIGN

Objective 1: Emphasize in Mission Bay the Characteristic Development Pattern Which Gives to the City and Its Neighborhoods an Image, a Sense of Purpose, and a Means of Orientation.

Policy 1: Integrate Mission Bay with surrounding districts, activities and the Bay.

Policy 2: Recognize and protect major views to and from Mission Bay, with particular attention to those of open space and water, using street view corridors and tiered building massing.

Policy 3: Create visual and physical access to San Francisco Bay and the China Basin Channel.

Policy 4: Recognize and take advantage of the adjacent existing street patterns wherever feasible.

Policy 5: Create a hierarchy of large-scale to small-scale open spaces and landscaping that provides visual definition for Mission Bay.

Policy 6: Recognize that buildings and open spaces, when seen together, produce a total effect that characterizes Mission Bay.

Policy 7: Develop Mission Bay open space character and images as an expression of the cultural and natural qualities of San Francisco.

Policy 8: Recognize that variety and contrast in an urban setting adds complexity and excitement.

Objective 2: Preserve Notable Landmarks and Areas of Historic, Architectural or Aesthetic Value, and Promote the Preservation of Other Buildings and Features that Provide Continuity with Mission Bay's Past.

Policy 1: Incorporate the existing houseboat community in the new development.

Policy 2: Retain and feature the 3rd and 4th Street drawbridges.

Policy 3: Where possible, use historically evocative shapes and forms, such as the original shape of Mission Bay and the Long Street Bridge, in the urban design.

Policy 4: Encourage the preservation of the firehouse.

Policy 5: Respect the character of older development nearby in the design of new buildings.

Policy 6: Maximize public benefits when vacating any public rights-of-way.

Policy 7: Incorporate and augment appropriate elements reflective of the tidal ecology of Mission Bay.

Objective 3: Acknowledge and Take Advantage of the Unique Features of the Mission Bay Area.

Policy 1: Enhance the bowl-like character of Mission Bay that is created by the surrounding natural hillsides and built environment.

Policy 2: Orient Mission Bay views and vistas to San Francisco Bay, its shoreline and China Basin Channel, and to Downtown and Potrero Hill.

Policy 3: Increase the visibility of major destination areas and other points for orientation through planned urban design of buildings and open space.

Policy 4: Emphasize the special nature of Mission Bay by linking land uses with water amenities and bringing open space into development areas.

Policy 5: Orient development and open space around waterways and water features to maximize enjoyment of the water.

Policy 6: Indicate the purposes of streets by varying roadway sizes and with plans for street landscaping and street lighting throughout Mission Bay.

Objective 4: Relate the Scale of New Development to the Adjacent Waterfront and to Existing Development Where Appropriate.

Policy 1: Encourage major new development within the Mission Bay area which generally steps down to the Bay.

Policy 2: Recognize the scale of the China Basin Building in establishing the scale of new nearby development.

Objective 5: Create a Variety of Uses in Mission Bay with Housing as a High Priority.

Policy 1: Phase proportional increments of office and/or R & D, and housing, and balance development with open space.

Policy 2: Integrate new development with existing adjacent development, especially with existing maritime activities.

Policy 3: Provide mixed-use developments at appropriate locations.

Policy 4: Provide pedestrian paths, bikeways and waterways that establish appropriate links with adjacent areas.

Policy 5: Provide for a variety of uses at the water's edge to enhance the viability and aesthetic quality of adjacent land uses, while providing maximum access to and use of the shoreline.

Policy 6: Provide for a substantial open space feature, and for open space that is distributed throughout the site to complement other land uses.

Policy 7: Provide adjacent uses that enliven and activate public open space.

Policy 8: Ensure public access throughout Mission Bay to the physically disabled and the elderly.

Objective 6: Create Distinctive Visual Character for the Mission Bay Area that is Compatible with Other Districts and an Enhancement for San Francisco.

Policy 1: Protect and create views from within Mission Bay of the downtown skyline, open spaces, the Bay Bridge and the Bay. Design and locate new development to preserve significant views from neighboring areas.

Policy 2: Promote the installation and maintenance of landscaping in public and private areas.

Policy 3: Promote harmony in the visual relationships and transitions between new and older buildings.

Policy 4: Promote efforts to achieve high quality of design for buildings and landscaping.

Policy 5: Avoid extreme contrasts in color, shape and other characteristics which will cause new buildings to stand out in excess of their public importance.

Policy 6: Encourage development of Mission Bay in a manner which results in a new, attractive view element as seen from neighboring areas.

Objective 7: Relate the Height and Bulk of New Buildings to Important Attributes of the Mission Bay Area.

Policy 1: Promote design and construction of building forms that will respect and improve the integrity of open spaces and other public areas.

Policy 2: Provide a range of building heights with up to eight occupied stories and avoid an overwhelming or dominating appearance in new construction.

Policy 3: Promote building forms that will enhance access to sunlight.

RESIDENTIAL NEIGHBORHOODS

Objective 1: Increase Substantially the City's Net Supply of Housing Through Development in Mission Bay.

Policy 1: Make housing a high priority land use to assist in ameliorating citywide housing needs.

Policy 2: Provide a mix of housing (sizes, tenure and types) that contributes to the citywide housing supply and to livability within Mission Bay.

Policy 3: Maximize the use of Mission Bay lands for housing in appropriate locations.

Policy 4: Discourage development of new housing in areas unsuitable for residential occupancy, such as next to I-280, on major thoroughfares and in industrial areas, except where adequate buffering can be provided.

Objective 2: Increase Substantially the City's Supply of Housing in Mission Bay in a Manner Compatible with Adjacent Neighborhoods and Other Areas Within Mission Bay.

Policy 1: Achieve high housing densities while providing a variety of housing types and articulated, human-scale building design.

Policy 2: Establish housing density parameters that take into account the size and diversity of the dwellings, provisions for open space, parking and daylight requirements.

Objective 3: Provide Housing Affordable by a Wide Range of Income Groups.

Policy 1: Use City financial powers and resources to reduce the cost and increase the supply of low- and moderate-cost housing.

Policy 2: Make maximum use of available Federal and State housing subsidy programs to provide affordable housing.

Policy 3: Encourage private efforts to provide affordable housing.

Policy 4: Ensure long-term affordability of low- and moderate-income housing.

Policy 5: Integrate mixed-income units throughout Mission Bay housing developments.

Policy 6: Create opportunities for innovative housing types that minimize construction and infrastructure costs without sacrificing durability and quality of construction.

Objective 4: Provide Maximum Housing Choice.

Policy 1: Provide housing opportunities for groups with special needs.

Policy 2: Provide accessible and adaptable housing for the physically disabled and the elderly.

Policy 3: Provide a range of rental housing opportunities.

Policy 4: Provide a range of opportunities for home ownership.

Policy 5: Provide housing suitable for persons with varied lifestyles.

Policy 6: Provide housing suitable for families with children.

Policy 7: Provide economic integration of housing.

Policy 8: Provide affordable housing units of quality and appearance comparable to market rate housing.

Policy 9: Promote housing types that can be adapted in the future to serve evolving needs of the population.

Policy 10: Avoid or Mitigate Hardships Imposed by Displacement within Mission Bay to the Extent Feasible.

Policy 11: Avoid or Mitigate Hardships Imposed by Displacement in Surrounding Areas Which May Be Induced by Mission Bay, to the Extent Feasible and Appropriate.

Objective 5: Develop Residential Neighborhoods of the Character and Quality of Traditional San Francisco Neighborhoods.

Policy 1: Create a consistent grid of streets, alleys and blocks related to the size of traditional San Francisco streets, alleys and blocks.

Policy 2: Create a pattern of perimeter block housing in which streets and public places are generally defined by building facades.

Policy 3: Provide on-street parking in the manner typical throughout the City, while limiting the amount of curb cut and garage door access along streets to the extent feasible.

Policy 4: Provide pedestrian or visual access to buildings along streets; avoid blank parking garage walls along streets.

Policy 5: Provide high-density, low-rise woodframe construction where possible and appropriate.

Policy 6: Integrate commercial uses into the residential areas through the use of mixed-use buildings on neighborhood commercial streets and permit artist live/work space when appropriate.

Policy 7: Use outdoor common areas, rather than internal corridors, for horizontal circulation in residential areas, when feasible.

Policy 8: Include adequate public improvements, services and amenities in all residential areas.

Objective 6: Develop a Pattern of Neighborhood-Scaled Open Spaces to Serve Residents.

Policy 1: Maintain about 25 percent of each residential block or parcel for private open space, with contiguous mid-block open spaces as appropriate.

Policy 2: Locate family units in close proximity to open space.

Policy 3: Incorporate frequent sunlit public squares and mini-parks in block patterns and allow for the potential for open space features within alleys.

Policy 4: Provide for small-scale and intimate private and semi private open spaces in residential areas.

Policy 5: Provide open spaces that are accessible to the physically disabled and the elderly.

Objective 7: Encourage Development to Ensure the Health and Safety of Residents of and Visitors to Mission Bay Neighborhoods.

Policy 1: Provide for building security through street orientation of housing and adequate street lighting.

Policy 2: Protect residential areas from the noise pollution and physical danger of excessive traffic.

Policy 3: Provide buffering for residential properties when heavy traffic cannot be avoided.

Policy 4: Provide for pedestrian and open space security through visibility of public spaces, and avoid quasi-public, obscured spaces with little sense of proprietorship.

COMMERCE AND INDUSTRY, HEALTH AND EDUCATION

Objective 1: Maintain and Enhance a Sound and Diverse Economic Base and Fiscal Structure for Mission Bay.

Policy 1: Provide commercial development in Mission Bay complementary to downtown office and retail development.

Policy 2: Attract new secondary office, research and development activities and other industrial activities, where feasible, to Mission Bay in order to add to the economic diversity of San Francisco.

Objective 2: Expand Employment Opportunities in Mission Bay for San Francisco Residents.

Policy 1: Promote efforts to attract, retain and expand commercial and research and development employment improvement opportunities for unskilled and semi-skilled workers.

Policy 2: Promote job training programs to impart skills relevant to Mission Bay.

Policy 3: Provide opportunities for newly emerging economic activities.

Policy 4: Promote the establishment of a cooperative affirmative action network for resident access to permanent jobs in Mission Bay and include goals for resident employment consistent with citywide standards.

Objective 3: Maintain and Enhance a Favorable Business Climate in Mission Bay.

Policy 1: Improve the viability and attractiveness of Mission Bay as a location for new research and development activity and other light industry to the extent possible.

Policy 2: Encourage development of secondary office space with floors, sizes and other appropriate incentives that will entice employers of entry-level office workers to locate in Mission Bay.

Policy 3: Provide land uses that are compatible with adjacent viable industrial activity.

Policy 4: Maintain an adequate supply of space appropriate to the needs of research and development and other incubator industries.

Policy 5: Provide opportunities for small businesses.

Policy 6: Integrate retail and personal services into commercial and industrial areas and encourage opportunities as appropriate for professional cultural facilities, to serve the Mission Bay businesses, residents, and working populations.

Objective 4: Enhance San Francisco's Maritime Potential.

Policy 1: Acknowledge the existing Port jurisdiction east of Third Street and the present Port and regional plans for Port expansion in that area unless and until a feasible alternative is demonstrated.

Policy 2: Avoid actions which may serve to displace desired existing maritime uses.

Policy 3: Provide appropriate noise and/or visual buffering between maritime activity and abutting development to avoid land use conflicts.

Objective 5: Create Viable Neighborhood Commercial Districts in Residential Areas.

Policy 1: Provide multiple-use neighborhood commercial areas with small-scale neighborhood-serving retail and service activities convenient to residents during their regular activities.

Policy 2: Encourage opportunities for neighborhood-based economic development.

Policy 3: Encourage the development of neighborhood commercial areas which have a character similar to other San Francisco neighborhood shopping streets, which integrate physically and visually with the surrounding areas and which are pedestrian-oriented.

Objective 6: Provide the Opportunity for Health and Educational Institutions or Activities in Mission Bay.

Policy 1: Provide opportunities for local-serving health, physical recreation and educational facilities and services.

Objective 7: Avoid or Mitigate Hardships Imposed by Displacement of Existing Businesses As Appropriate.

Objective 8: Assure that Commercial and Industrial Uses Meet Minimum Reasonable Performance Standards.

Policy 1: Provide for the adequate security of employees and property.

Policy 2: Provide a safe and pleasant working environment within commercial and industrial areas and encourage development comparable in scale and character to new northeastern waterfront development.

Objective 9: Guide the Location of Visitor-Related Activities to Minimize Their Adverse Impacts on Mission Bay Residential, Commercial and Industrial Activities.

Policy 1: Locate commercial features with the potential to attract many visitors in areas that can accommodate and benefit from high activity levels.

TRANSPORTATION

Objective 1: Meet Needs of Mission Bay Residents, the Working Population and Visitors for Safe, Convenient and Inexpensive Travel.

Policy 1: Coordinate Mission Bay regional and local transportation systems planning.

Policy 2: Plan for transit as a primary mode of travel to, within and from Mission Bay.

Policy 3: Plan for the removal of the stub end of I-280 and balanced distribution of vehicular traffic on surface streets.

Policy 4: Explore alternative forms of transportation to link Mission Bay with Bay Area destinations.

Policy 5: Limit long-term parking for Mission Bay workers within Mission Bay. Seek to achieve the same modal split ratio that applies in the Downtown.

Policy 6: Develop a coordinated commute alternative program for Mission Bay employees and residents.

Policy 7: Meet transportation needs of the physically disabled and elderly, consistent with citywide standards.

Objective 2: Expand Transit Services To, From, Through and Within Mission Bay.

Policy 1: Expand public transit routes to permit convenient connections to downtown and other San Francisco destinations.

Policy 2: Provide right-of-way for the extension of regional transit service to downtown from peninsula transit corridors.

Policy 3: Provide an extension of MUNI Metro into Mission Bay and the opportunity for future extensions to the south and west of Mission Bay.

Policy 4: Establish transit preferential lanes on Mission Bay streets where significant transit services are provided.

Policy 5: Create a transit center within Mission Bay for convenient local and regional transit system transfers.

Objective 3: Establish a Street System in Which the Function and Design of Each Street is Consistent with the Character and Use of Adjacent Land and with the Goal of Providing Efficient Traffic Flow.

Policy 1: Integrate the Mission Bay street system with the surrounding fabric of City streets to the maximum extent possible.

Policy 2: Design the Mission Bay street system to the minimum scale necessary to provide required movement and access functions.

Policy 3: Establish an official truck route system along designated major and secondary thoroughfares to facilitate truck movements within and through Mission Bay.

Policy 4: Continue to provide adequate truck and rail access to businesses and maritime facilities in San Francisco.

Policy 5: Discourage non-local travel in and around residences, and non-recreational travel in parks and recreation areas in Mission Bay.

Policy 6: Coordinate freeway interchanges from Interstate 280 with the City street system both within and surrounding the Mission Bay area.

Objective 4: Provide Only the Amount of Parking and Loading Necessary to Serve Mission Bay Without Adversely Affecting Livability Within Mission Bay.

Policy 1: Do not provide long-term parking for downtown commuters at Mission Bay.

Policy 2: Provide an adequate amount of off-street parking spaces for residential development.

Policy 3: Provide sufficient off-street loading and parking spaces for delivery and service vehicles.

Policy 4: Encourage the multiple use of parking facilities to maximize their ability to serve daytime, evening and weekend populations.

Objective 5: Provide for Convenient, Safe and Pleasant Pedestrian Circulation.

Policy 1: Develop an extensive pedestrian network in Mission Bay which will permit future connection with pedestrian systems that may be proposed for the South of Market, Showplace Square and Potrero Hill areas.

Policy 2: Provide for pedestrian circulation and open space use in public rights-of-way not required for vehicular traffic.

Policy 3: Provide handicapped access in pedestrian areas.

Policy 4: Provide sidewalks of sufficient width to facilitate pedestrian use.

Policy 5: Give priority to pedestrian circulation in Mission Bay.

Objective 6: Provide for the Safe and Convenient Use of the Bicycle as a Means of Transportation and Recreation.

Policy 1: Establish bicycle routes through provision of roadway bike lanes where appropriate within the Mission Bay area.

Policy 2: Provide secure and convenient parking facilities for bicycles at major commercial and residential developments, at transit terminals, and at major open space areas.

Objective 7: Establish Significant Entrances to Mission Bay and Link it with Surrounding Districts.

Policy 1: Upgrade the quality and image of the major thoroughfares that link Mission Bay with downtown.

Policy 2: Link the Embarcadero circulation system with Mission Bay.

Policy 3: Create a significant gateway to Mission Bay at 3rd and 4th Streets near the China Basin Channel.

Policy 4: Provide visual and physical circulation links between Mission Bay and Showplace Square, and between Mission Bay and Potrero Hill.

Objective 8: Create a Hierarchy of Pedestrian and Vehicular Routes that Clearly Link Mission Bay Land Uses.

Policy 1: Provide visibility for major public activity areas along pedestrian and vehicular routes.

Policy 2: Encourage retail and community service streets which connect with Mission Bay thoroughfares.

Policy 3: Provide a variety of street amenities to ensure quality street environments.

Policy 4: Develop alleyways and side streets so that they can be used for outdoor recreation and as pedestrian amenities.

Objective 9: Create a Pleasant and Functional Pedestrian Environment.

Policy 1: Recognize the importance of the pedestrian environment at the street levels of buildings.

Policy 2: Create a network of pedestrian paths which connect important Mission Bay origins and destinations.

Policy 3: Expand and enhance pedestrian access to the edge of the Bay and to China Basin Channel.

Policy 4: Buffer pedestrians from heavy truck, transit and automobile traffic.

RECREATION AND OPEN SPACE

Objective 1: Maintain and Enhance Significant Segments of the Central Waterfront Bay and China Basin Channel Shoreline for Public Access.

Policy 1: Provide maximum feasible public access along the shoreline.

Policy 2: Maximize the interface between land and water.

Policy 3: Provide a variety of recreational opportunities along the shoreline accessible to the public.

Policy 4: Preserve and enhance the special amenities of the China Basin Channel.

Objective 2: Achieve a Balance Between the Conservation, Utilization and Development of Mission Bay's Natural Resources.

Policy 1: Preserve and enhance the natural resources of the Mission Bay area and its environs.

Policy 2: Encourage the development of open space that reflects the natural and historic qualities of Mission Bay.

Policy 3: Maintain and improve the existing wildlife environment on or near the Mission Bay site.

Objective 3: Maintain and Improve the Quality of the Bay and Shoreline Areas, Including China Basin Channel and Its Waters.

Policy 1: Promote tidal or mechanical flushing in waterways to minimize stagnant waters.

OBJECTIVES AND POLICIES

Objective 4: Assure that the Land Resources of Mission Bay Are Used in Ways that Both Respect and Preserve the Natural Values of the Land and Serve the Best Interests of the City and the Mission Bay Community.

Policy 1: Encourage broad and effective management of Mission Bay natural resources.

Objective 5: Provide a Major Open Space Area and a Variety of Open Spaces Adequate to Serve the Mission Bay Community and to Augment the City's Open Space Network.

Policy 1: Create parks, open space and recreational facilities to serve the needs of Mission Bay residents, workers and visitors of all age levels.

Policy 2: Provide a major open space area which adds to the citywide open space system and takes advantage of the shoreline location of Mission Bay.

Policy 3: Provide a variety of open spaces to serve neighborhood commercial areas and office and other commercial or industrial areas within Mission Bay.

Policy 4: Ensure that parks and recreational facilities are designed to be handicapped-accessible.

Objective 6: Locate Parks and Open Spaces so that They Are Well Distributed Throughout Mission Bay and Take Full Advantage of Existing Natural Features.

Policy 1: Provide suitable open space and recreational facilities within comfortable walking distance of all Mission Bay residences.

Policy 2: Provide suitable open spaces convenient to the working population within Mission Bay and nearby areas.

Policy 3: Seek to orient development and parks, public and private open space, and pedestrian areas to maximize solar access.

Policy 4: Enhance parks and open spaces by maintaining view corridors from such areas.

Objective 7: Create an Open Space Network Which Provides Links Between Different Recreation and Open Space Areas.

Policy 1: Provide walking, jogging and bicycle paths between recreation and open space areas within Mission Bay, and provide connections to citywide pedestrian, bicycle and open space systems.

Objective 8: Develop Parks and Open Space with Landscaping and Design Features that Differentiate Kinds of Use.

Policy 1: Provide parks and open spaces that include passive or non-facilities-oriented recreation opportunities separate from active recreation areas.

Policy 2: Provide parks and open spaces that allow non-facilities-oriented field play opportunities.

Policy 3: Provide parks and open spaces that allow facilities oriented active play that do not conflict with non facilities or passive recreation areas.

Policy 4: Create both hard and soft edges along the water in the Mission Bay area.

Policy 5: Ensure wind protection for public open spaces where feasible.

Policy 6: Assure that shorelines, natural areas, parks and recreation facilities are accessible to the physically disabled and the elderly.

ENVIRONMENTAL PROTECTION

Objective 1: Ensure that All New Mission Bay Development Meets Strict Environmental Quality Standards.

Policy 1: Ensure that use of hazardous materials does not create undesirable levels of risk for employees and nearby populations.

Objective 2: Minimize Transportation-Related Noise.

Policy 1: Encourage the use of electric trolleys for new transit within Mission Bay.

Policy 2: Discourage greater traffic noise in noise-sensitive areas.

Objective 3: Locate Land Uses That Are Compatible with Transportation Noise Levels.

Policy 1: Discourage new uses in areas in which the noise level exceeds the noise compatibility guidelines for that use.

Objective 4: Minimize the Impact of Noise on Affected Areas.

Policy 1: Promote site planning, building orientation and design that will lessen or buffer noise intrusion.

Policy 2: Promote the incorporation of noise insulation materials in new construction.

Objective 5: Encourage Efficient Utilization of Existing Utilities Where Feasible.

Policy 1: Provide adequate utilities for each phase of development.

COMMUNITY FACILITIES

Objective 1: Assure that Adequate Community Services and Facilities are Provided for Mission Bay Residents and Working Population.

Policy 1: Provide for general public safety services and recreation facilities, and encourage development of cultural resource facilities at a scale appropriate to the commercial and residential development of Mission Bay, and consistent with the existing provisions for such amenities throughout the City.

Policy 2: Provide opportunities for neighborhood centers that are linked to other neighborhood and citywide services.

Policy 3: Encourage the establishment of neighborhood center management structures and administration which ensure responsiveness to changing neighborhood needs.

Objective 2: Provide Well-Distributed and Designed Fire and Police Support Facilities that Maximize the Effectiveness, Use and Accessibility of Firefighting and Police Services in Mission Bay.

Policy 1: Locate and design facilities in a manner that encourages constructive police/neighborhood interaction.

Objective 3: Provide for Such Additional Community Services, Including Childcare, as Are Determined to be Necessary and Feasible Consistent with Citywide Standards.

Objective 4: Provide Neighborhood Facilities that Meet the Varied Needs of Mission Bay Residents.

Policy 1: Provide for a neighborhood center which will be available to the community that is multi-purpose in character, attractive in design, secure and comfortable, and inherently flexible in meeting the current and changing needs of the neighborhood served.

Policy 2: Locate neighborhood center uses contiguous to public open space, and to residential and neighborhood commercial areas.

Policy 3: Provide community facilities for the physically handicapped and the elderly.

COMMUNITY SAFETY

Objective 1: Minimize Hazards to Life Safety and Property Damage in Mission Bay.

Policy 1: Ensure that land uses and structures are located to meet acceptable minimum levels of risk.

Policy 2: Provide for emergency services in Mission Bay.

Policy 3: Provide comprehensive emergency response planning in coordination with the Mayor's Office of Emergency Services.

Objective 2: Create Development Designed to Ensure Seismic Safety.

Policy 1: Require geologic or soil engineering site investigations, and compensating structural design based on findings, for all new structures in special geologic study areas.

Policy 2: Critical community facilities, if located in special geologic study areas, should have special engineering design to assure that identified risks have been ameliorated.

ENERGY

Objective 1: Promote Energy Conservation in Mission Bay.

Policy 1: Explore the use of alternative energy sources and consider a district heating system.

Policy 2: Provide recycling facilities for residents.

Objective 2: Encourage Development Which is Sensitive to the Needs for Solar Access, Shelter from Winds and Ventilation.

Policy 1: Orient streets and residential buildings for maximum solar access to dwelling units where appropriate.

Policy 2: Provide solar access for major indoor living spaces and exterior private spaces to the extent feasible.

Policy 3: Provide through ventilations of dwelling units where possible.

Policy 4: Create wind shielding for private open space where appropriate.

THE PLAN

5. The Plan

This plan proposes a new neighborhood for San Francisco. Both residents and workers will share natural amenities unique to San Francisco and urban amenities traditionally well-loved by San Franciscans. Mission Bay development will express contemporary design technology yet build on the richness of the area's past. To create a healthy new neighborhood, a variety of land uses on an orderly street grid and linked by an extensive open space system has been developed. Streetscapes, open spaces and architectural form add character to this simple yet integrated system. Through development of this area, new and extraordinary opportunities can be realized for San Franciscans to reside, work, play and enjoy the Bay and China Basin shorelines (see Figure 3). Over the coming twenty years, Mission Bay will make a significant contribution to the City's life.

5.1 MAJOR FEATURES

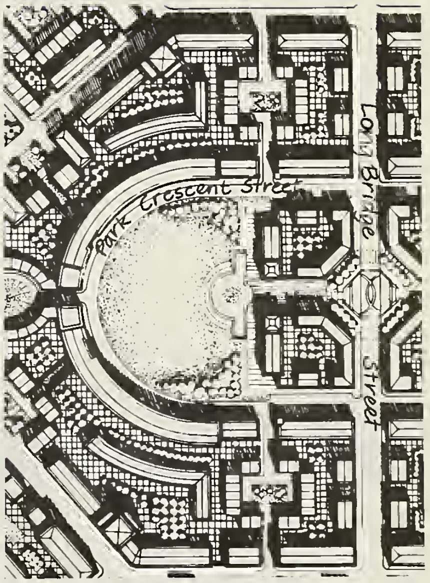
This plan has several major features:

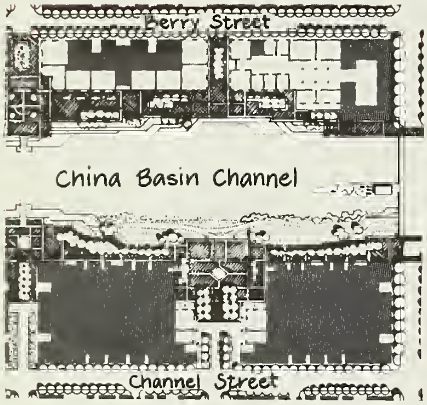
- Up to 8,000 new dwelling units for all types of households. Varying densities, unit sizes and developable parcel sizes will meet a wide range of housing needs. Studios up to large units will be able to accommodate individuals, families and households with special needs.

- High density, low- and mid-rise residential development characteristic of the City's most urban neighborhoods. Densities, building height variations, building facade location and design yield a predictably desirable kind of residential character.

- A central, pedestrian-oriented neighborhood shopping street. Long Bridge Street is five blocks of small shops and services, all within a five minute walk of most residences. In conjunction with larger-scale retail in the next block on Third Street, this shopping is accessible for residents citywide. The retail plan repeats a familiar San Francisco pattern of parallel vehicular- and pedestrian-oriented retail streets.

- Integrated living and working environments. Up to 22,000 new jobs will be created during and after site development. Along King, Third and Long Bridge Streets, fairly intensive daytime and nighttime use




Berry Street
China Basin Channel
Channel Street

of streets and facilities is planned by placing housing near workplaces. Many residents will be able to walk to work.

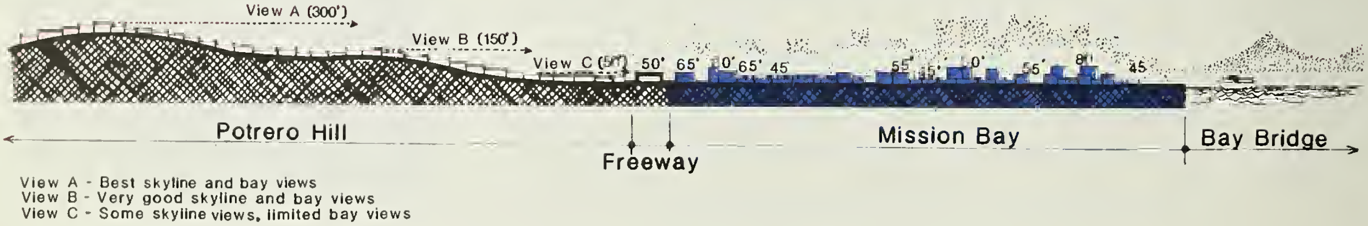
- Sixty-five (65) acres of parks, recreation and natural resource areas. Access to and use of the Bay and Channel shorelines are emphasized. The Channel and its parks and plazas provide various public gathering areas which are linked with a central neighborhood park and with an expansive park along the Bay. An eighteen acre wetlands habitat and park is situated where the Channel meets the Bay. Numerous views and vistas are planned along streets and through open spaces.

- All dwelling units are either next to or within two minutes of open spaces and parks. A series of open space experiences can be found along the China Basin Channel, moving south through the residences to a central park area then east to the Bay shoreline park.

- Streetscapes and public spaces with lively and safe public life. Street level building entrances and walls, street landscaping, a system of sidewalks, lanes and pedestrian paths, and accessible open space all contribute to encourage public use and enjoyment of a safe urban environment.

- Links with Neighboring Areas. The scale, intensity and character of the development are complementary to adjacent land uses, nearby streets and its natural setting. All residents will be within two blocks of transit lines connecting to other parts of the City.

- Phased development with balanced mixed uses, community services and recognizable neighborhood identity. Housing, jobs, associated retail, open space and infrastructure can be combined in each phase. Community services and cultural facilities can be provided as Mission Bay grows.


View A (300')
View B (150')
View C (50')
50'
65'
65'
45
55'
55'
45
Potrero Hill
Freeway
Mission Bay
Bay Bridge
View A - Best skyline and bay views
View B - Very good skyline and bay views
View C - Some skyline views, limited bay views

Illustrative Plan

Mission Bay

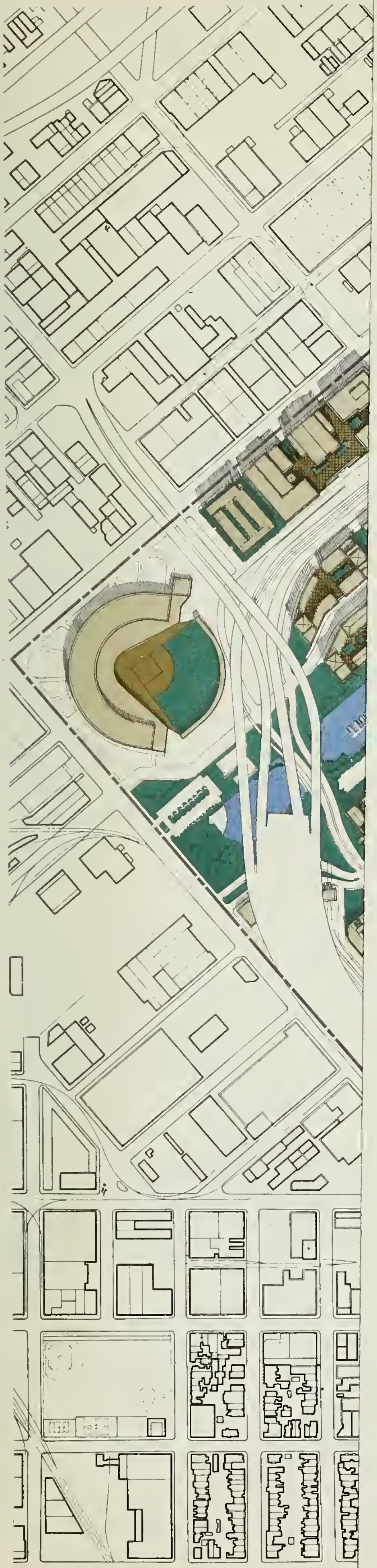
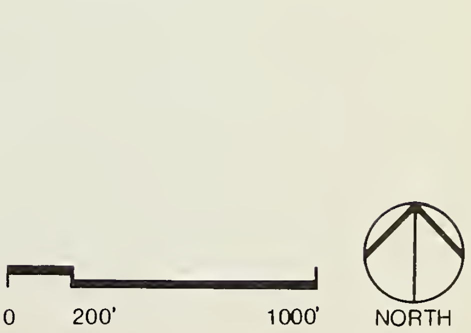


Figure 3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200'
1000'
NORTH

Illustrative Plan

Mission Bay

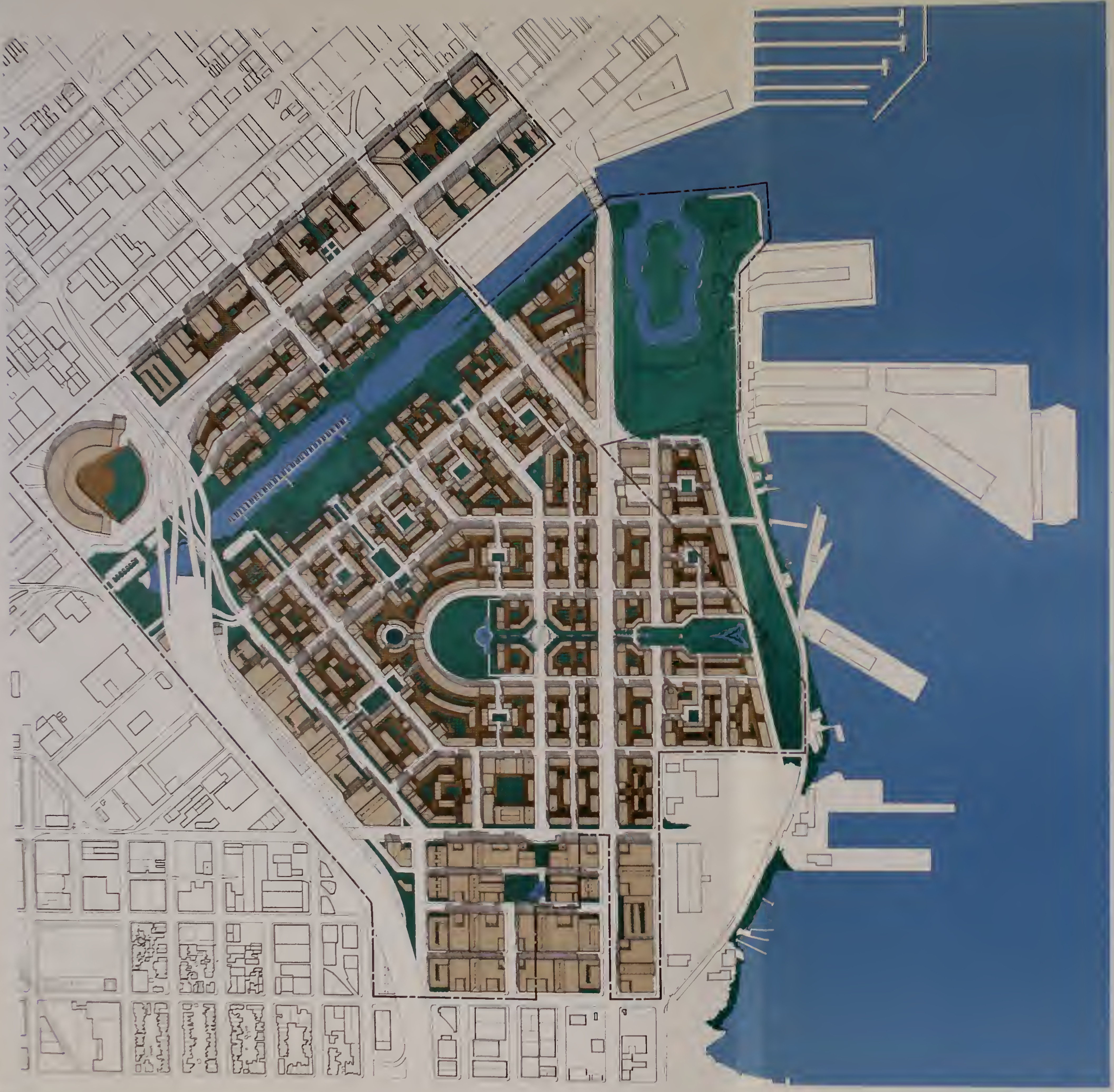
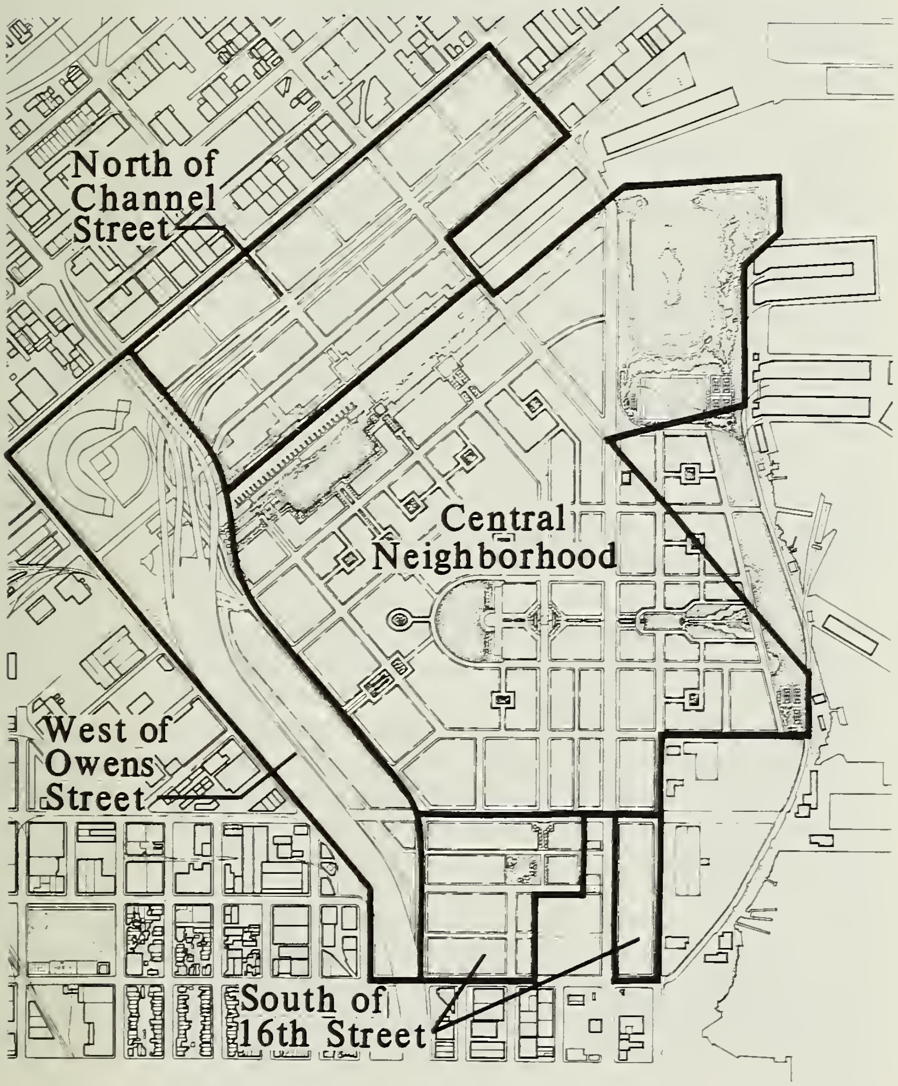
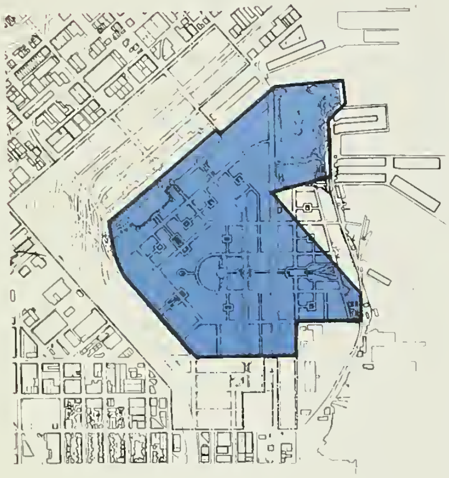


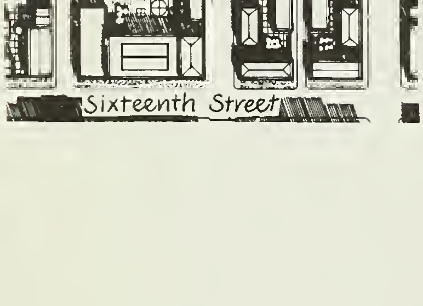
Figure 3

5.2 PLAN AREAS

Mission Bay is comprised of several distinctive areas. Each area contains a unique blend of economic and social activities, urban forms, functions and amenities.


North of Channel Street
Central Neighborhood
West of Owens Street
South of 16th Street





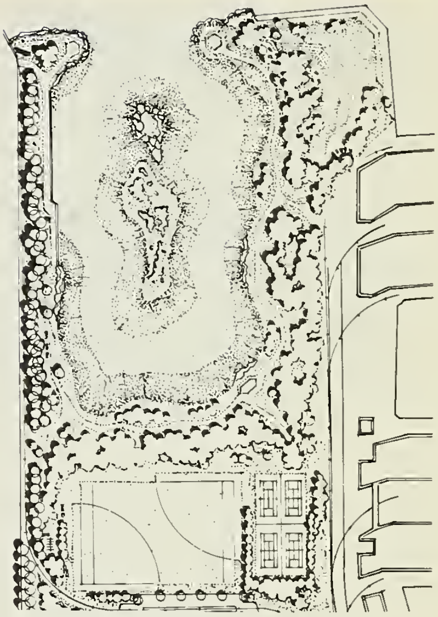
Central Neighborhood

The heart of Mission Bay will be dominated by housing and uses ancillary to it. Across 42 blocks will be at least 6,200 residences in blocks ranging in density from 60 to 165 units (210 for elderly) per acre. These housing blocks will shape the edge of the Channel parks between Owens and Third Streets and extend south to Sixteenth Street and east to the Bay shoreline park. In most blocks, residents will be able to share at-grade mini-parks internal to their block and/or podium level private open space.

A wide mix of people will live here, as in other San Francisco neighborhoods. Families will enjoy the larger units and conveniences of this area. Higher density along Owens and Channel Streets will accommodate elderly and affordable housing with residents who will also value the neighborhood character. Public safety will be enhanced throughout this area by the mix of uses and the orientation of housing towards the street; activities will focus on the street for the security of all. Low-rise walk-up housing and other types of housing blocks in this area will offer unique open spaces in the form of mini-parks alongside mid-block lanes. The mini-parks will serve as valuable open space but also contribute to the sense of community within the residential blocks. Residents of all ages will use the parks and appreciate the availability of a safe, quiet place to relax and enjoy the outdoors.

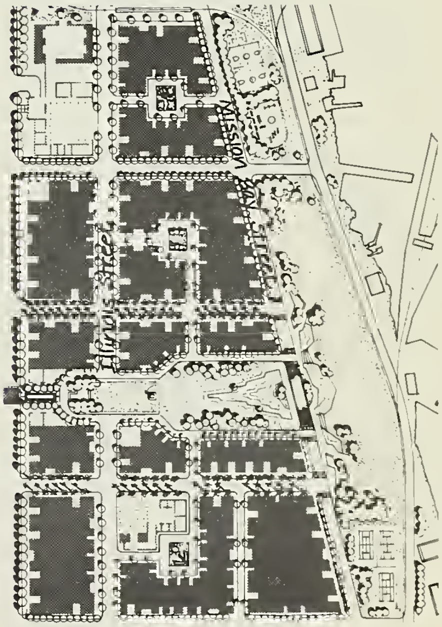
Central to this neighborhood will be Long Bridge Street, a linear retail district of shops and services. Not more than five blocks on flat land from any housing unit, it will attract residents for shopping and socializing. It will include the variety of stores found on other popular San Francisco shopping streets. Community and cultural facilities will be concentrated at the neighborhood's center on this street. People will come to the library to read, to the theater for other enrichment, and use the child care facility on the way. The health or social services offices and senior center will address other needs. These features will establish the Long Bridge Street and neighborhood's identity by creating a gathering place and enhancing the street's value as a Mission Bay destination. Because the street is readily accessible and will have its own mix of uses, it may also attract visitors from other neighborhoods.

Other convenience shopping will be encouraged at street corners throughout the neighborhood. The supermarket at Third and Sixteenth Streets and other more vehicular-oriented retail on Third Street will attract different shoppers interested in weekly grocery shopping or larger-scale comparison shopping. A school site is being reserved at Sixteenth Street with an alternative location near the wetlands park so that educational needs of this growing community can be handled. One or more nearby churches may serve the spiritual needs of the community.



A significant open space system will lend form to this sunny neighborhood. About 1,000 dwelling units along with twenty houseboats and other recreational craft will occupy the southern edge of an improved China Basin Channel. Opportunities will exist along the Channel's edge for water-oriented restaurants, cafes and shops as well as quiet enjoyment of this amenity. A different, more reflective environment will be provided at the mouth of the Channel, where a salt marsh wetlands habitat eases the site into the Bay and evokes memories of a Mission Bay that was once a quiet marsh-lined inlet on San Francisco Bay.

Crescent Park will be surrounded by housing and is intended primarily for local use with play facilities and passive recreation areas. This central neighborhood park will provide a broad landscaped place for children or adults to throw a ball or frisbee or to play a pick-up game of football or soccer. Families will be able to picnic here, and people of all ages will enjoy other uses of this space adjacent to the community center and shopping street. Community groups using meeting space at the adjacent community facilities will also be able to use this park, as will people attending cultural events. Residents will be able to walk safely to this park from several directions on small landscaped streets or lanes. A community recreation center and perhaps several private fitness centers may serve this area as well.

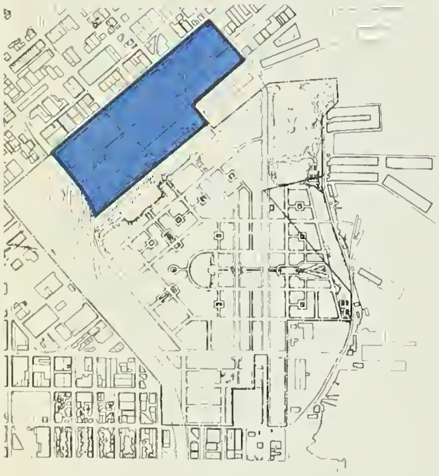


A wide open space corridor will extend from this multi-purpose neighborhood center area to Fountain Park at the Bay where an expansive green (Mission Bay Green) and playing fields will be located. Paralleling this open space spine will be two distinctively landscaped streets that provide circulation and visual access to the Bay.

At its northern end, the shoreline green will connect to the most unique feature of the Mission Bay open space system, an eighteen acre park at the mouth of China Basin Channel. At least thirteen and one-half (13.5) acres of this park will be devoted to a wetlands habitat. Shorebirds and other waterfowl are expected to inhabit it, along with the fish, invertebrates and vegetative species that make it a viable habitat. It also will become an educational resource for San Franciscans, who will be able to visit this unusual area, observe it and gain an understanding of this natural setting. Mission Bay residents and their children will find it particularly appealing, learning most about it by being able to walk to visit it at different tidal levels year-round. Active maritime uses will continue along this shoreline at Piers 48, 50 and 54, and their activity will add variety and interest for park visitors. Because of this area's waterfront quality and warmer weather, people throughout San Francisco will undoubtedly come to enjoy the park.

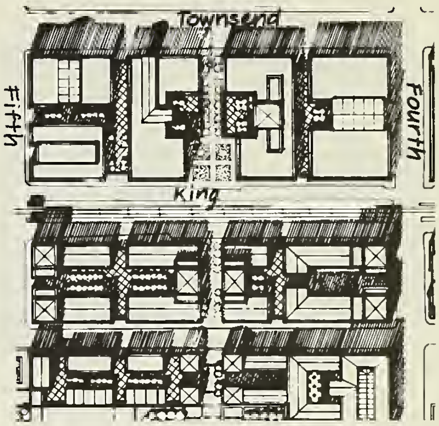
Neighborhood-sized landscaped streets with on-street parking will provide vehicular and bicycle access in the area. On selected streets, several Muni routes will make frequent stops near the housing. All homes will be within about two blocks of a transit route, and people will be able to quickly reach downtown jobs as well as visit other parts of the City. A system of ample sidewalks, pedestrian paths in open space, and one-way lanes internal to residential blocks will allow pedestrians to circulate with relative safety. Many will walk to jobs within Mission Bay, Showplace Square or the South of Market. Third and Sixteenth Streets and the other roadways around the perimeter of the neighborhood readily connect this area with the rest of the City. Parking will be easier here than in most city neighborhoods, as residents will have a parking space for each unit in multi-car garages with few driveways, thus maximizing the on-street parking supply. People will be able to use walking circuits and jogging routes throughout the open space system to either exercise or get to favored destinations.

North Channel



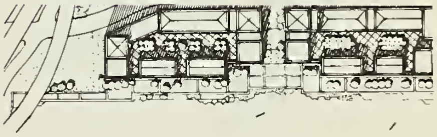
The eight blocks north of China Basin Channel will form a working and residential neighborhood, in many respects an extension of the South of Market area. Within the South of Market street grid will be office buildings for up to 13,000 workers along King Street. Up to 1,000 residents will live along King Street, and additional high-density housing is planned along Berry Street and the Channel. These will be primarily singles, couples without children or whose children have grown, and seniors whose space needs will match the smaller-sized units of this dense area.

Both daytime and nighttime activity will be fairly intensive in this highly urban, mixed-use area. The broad, heavily landscaped King Street with its many vehicles and activities will be a central corridor for Mission Bay. Muni Metro moves down King from The Embarcadero and I-280 empties regional traffic onto it. Many workers and residents will use the wide sidewalks on King Street and pedestrian lanes nearby where shops and restaurants may be found. Across the relatively quiet Berry Street, with housing to the south, the China Basin Channel park system will sculpt the northern Channel edge, in a somewhat more urban character than the public greens on the southern side. The Channel parks will be a lunchtime haven for office-workers and a weekend haven for residents. City visitors will likely form their first images of Mission Bay in these parks and plazas.



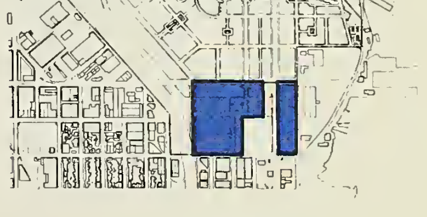
The four office blocks will be intensively developed with 8-story office buildings and parking structures of a smaller scale, comparable to those of the Northern Waterfront. These offices will accommodate large clerical and data processing workforces who will enjoy child care and other conveniences of this area and its superb transit access. Sheltered open spaces within the blocks and the occasional rooftop garden will serve as quiet oases at lunchtime and after hours.

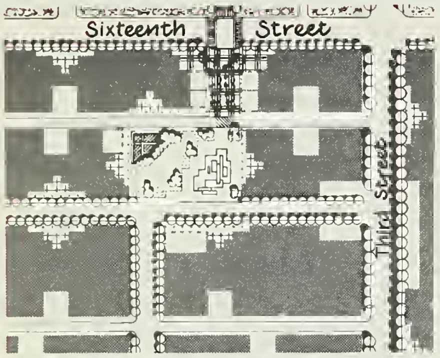
Residential blocks (with private internal open space) across the street will be densely developed blocks housing a mixture of households. Workers in these units can either walk across the street to work, or take the Metro or (on a nice day) walk to downtown. Alternatively, reverse-commuters can take the Caltrain to Peninsula jobs. Some may decide a car is not needed with these transit services and full spectrum or nearby activities, and will forego both car and parking space rental to lower their housing costs. Elderly persons in these units will value the mixture of activities on the streets, the proximity of transit and the chance to enjoy the nearby Channel and its parks. Indeed, many residential units (up to 1,000) will enjoy Channel views from their homes. These buildings will all have elevators, making all levels accessible to the physically disabled. The ground floor of these buildings will have parking for residents, with newstands, flower stands and other pedestrian amenities typical to busy San Francisco sidewalks. A hotel will overlook the Channel next to Fourth Street and, with its entertainment, dining and shopping facilities and its visitors, will add to the vitality along the Channel plazas and parks and provide more nightlife for residents.



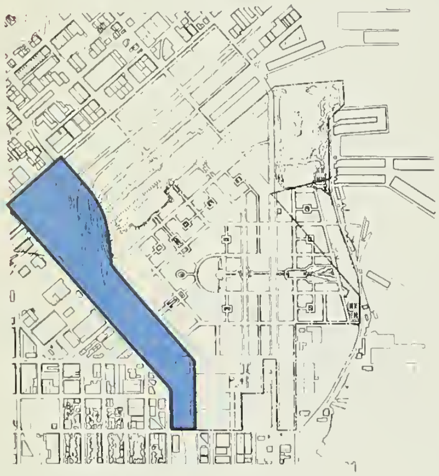
South of Sixteenth

The southern side of Sixteenth Street will be bordered by service, light industrial, and research and development uses. One company may occupy the area in a campus-like setting with meandering open space for its employees, or several users on parcels of varying sizes may share a common public park. During the day, there will be significant amounts of both pedestrian and vehicular activity when up to 7,000 workers are at work and trucks deliver and pick up goods. Workers will be able to walk along landscaped streets to the Bay park or use the nearby shopping street.





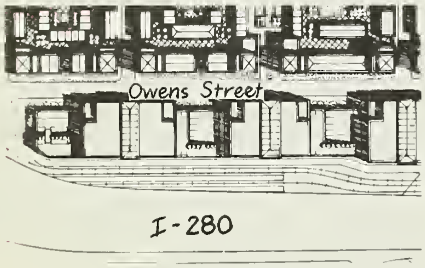
This workplace will be within easy walking distance for workers who live in Mission Bay or commuters who could use the Muni Metro stop planned at Sixteenth or other transit travelling along Third and Sixteenth Streets. Third and Owens Streets, and I-280 with its Mariposa Street ramps will provide convenient access to and from the site for workers, trucks or service vehicles. Buildings in the area will be three to five stories in height, probably with the larger building footprint found in many light industrial structures. This scale of development will become integrated over time with development to the south and east across Third Street. It will be compatible in scale with housing on the north as well.



West of Owens and I-280

Service/light industrial/research and development uses and transportation facilities form the western perimeter of the site which is primarily a transportation corridor. The buildings along Owens Street, although well-served by Muni Metro and Caltrain, will probably be oriented toward the neighborhood residential area to the east. Owens Street will be heavily landscaped but may be a noisy, heavily-trafficked arterial, so buildings here will be six stories, designed to buffer noise from Caltrain and I-280 as well as Owens Street. Workers will primarily use sidewalks at lunch or after work to get to transportation, reach a nearby landscaped area or to find a friendly place along China Basin Channel to relax.

A cluster of shops and services at the Caltrain and Metro station near Seventh and Channel will make this a lively transit center used by many local, citywide and regional travelers. Similarly, a Metro station with convenience retail is planned at Sixteenth Street between Owens and Seventh Streets. By contrast, few people but rail workers will frequent the shadowed area under I-280 where Caltrain and Muni Metro tracks run between these stops.



West of Sixth Street, the Channel passes under the overhead freeway before it comes out into the sun again near Seventh Street and the Clean Water Program's Channel Pump Station and Division Street sewer outfall. Public access will continue at the water's edge through this area. The open space will connect with Seventh Street to provide an invitation for open space use at the site's boundary and to preserve vistas west to Twin Peaks and Diamond Heights.

The northwest corner of the site, at Seventh and Townsend Streets, is currently proposed for a ballpark. This corner is fairly isolated from the rest of Mission Bay by the I-280 freeway ramps which, combined with the Caltrain, give the ballpark good access from the

Peninsula. Ballpark patrons may also visit Mission Bay open space, shops and other facilities, and would share parking with office and S/LI/RD uses in the vicinity for weeknight and weekend games.

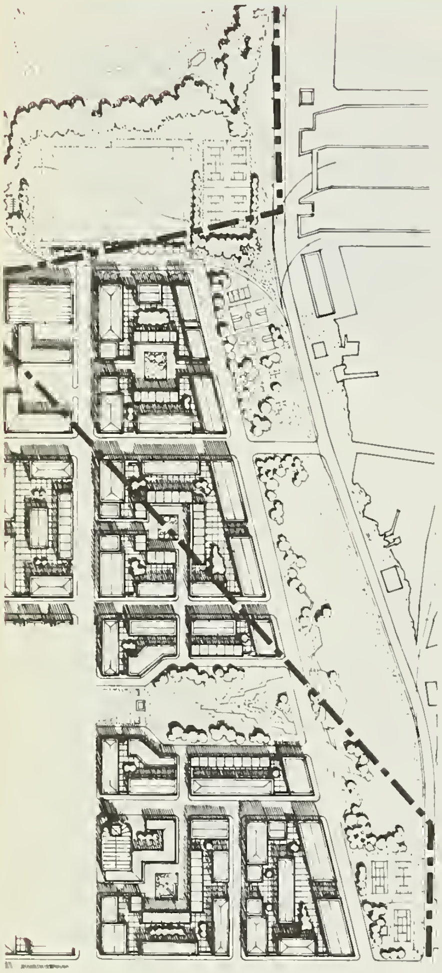
5.3 PHYSICAL PLAN ELEMENTS

This section describes the land use, open space, circulation, and utility elements of the plan. They derive from the Objectives and Policies document and land use, open space and circulation concepts in Choices for Mission Bay. They have been refined and integrated during the planning/design process. First, the overall intent and form of an element is provided; then, the location, function and uses of its components are further defined. Variations to the plan conclude the chapter.

5.3.1 Land Use Element

The land use element displays the arrangement of housing, commercial, industrial, retail, community service, cultural, hotel and ballpark uses on the site (see Figure 4: Land Use). Their arrangement has been determined by analysis of (1) Mission Bay objectives and policies, (2) existing physical conditions, (3) siting and functional requirements of each use, and (4) land use compatibility criteria. This balanced mix of uses meshes with the open space, circulation, and utility elements that are described in the following sections.

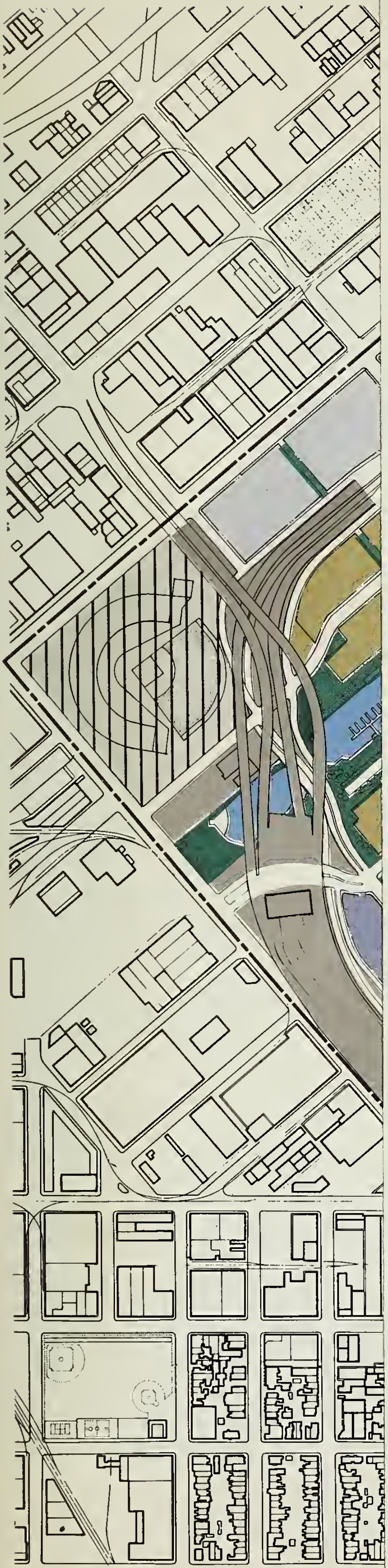
In addition, the land use element results from efforts to establish a balanced mixed-use development on this site. A variety of uses providing housing, open space, jobs and associated other uses is programmed in accordance with (a) the physical capacity of the site to support development; (b) city needs or objectives; and (c) planning and market criteria for balanced long-term development. The ability to market a variety of uses is important to the ongoing economic feasibility of Mission Bay. Revenue derived from a mix of uses can help support a variety of public goals sought for Mission Bay, including the plan's social and economic components described in this section.



Of the 294 acres within the Mission Bay site, 89 acres must be used for I-280/Caltrain rights-of-way and for necessary streets and sidewalks. Seventy (70) acres must be preserved for the desired variety of open space and recreation uses. Development of buildings for housing, employment, retail, community/cultural facilities and other ancillary uses must be accomplished on the remaining 135 acres. The result is a fairly dense, highly urban development that makes substantial contributions to housing, employment and recreation needs in San Francisco.

The plan as drawn includes a 14-acre parcel of Port land immediately adjacent to the Mission Bay site, and depicts open space, housing and community facilities on that land. This land would become part of the overall development if the land exchange discussed in Section 3 occurs. The following table notes where there could be additions to open space, housing, community facilities and streets in Mission Bay with this additional 14 acres.

The program shown will produce a feasible and desirable level of development although adjustments in the program for each use are possible. The recommended program is based on acreage availability, appropriate building heights and prototypes, and urban design considerations. Where variation is possible, it is noted. With respect to office and S/LI/RD, ranges are indicated. Achieving the higher densities depends on specifics of the zoning ordinance, development agreement and financing plan, including the resolution of various design, environmental, transportation and financial factors. Each of the land uses planned for the site is described, with detailed programmatic characteristics, following the general program.



Land Use Element

Mission Bay

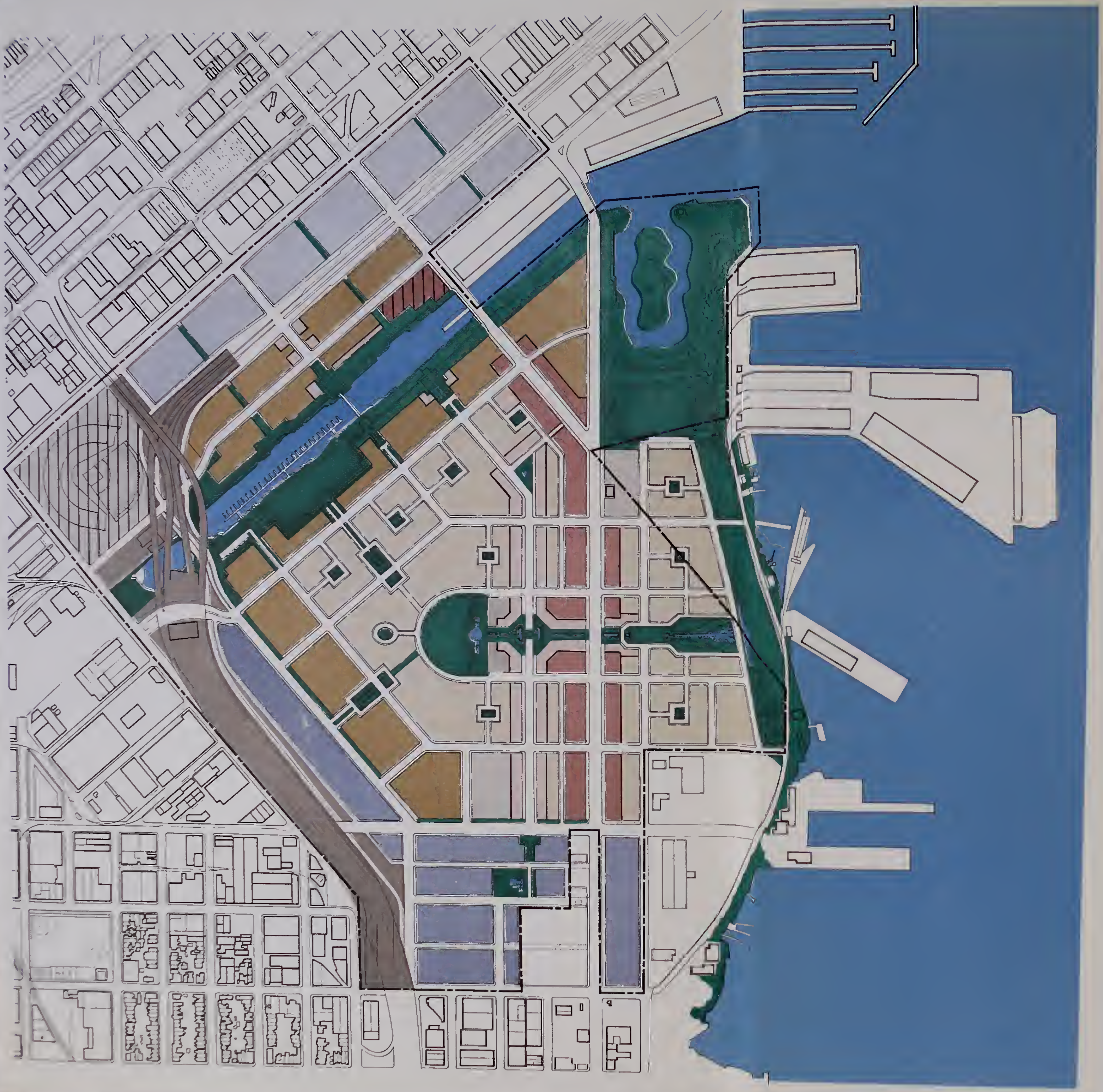
- 🟨 Housing - Low Density
- 🟨 Housing - High Density
- ⬜ Office
- 🟪 Service/Light Industrial/R&D
- 🟥 Housing w/Neighborhood Retail Below
- 🟥 Housing w/Large Scale Retail Below
- ▥ Hotel
- ⬜ Community/Cultural Facilities
- ||||||| Ball Park
- ⬛ Other
- 🟩 Open Space
- 🟦 Water

Figure 4

0
200'
1000'
NORTH

Land Use Element

Mission Bay



- ■ Housing - Low Density
- ■ Housing - High Density
- ■ Office
- ■ Service/Light Industrial/R&D
- ■ Housing w/Neighborhood Retail Below
- ■ Housing w/Large Scale Retail Below
- ▥ Hotel
- ■ Community/Cultural Facilities
- ▥ Ball Park
- ■ Other
- ■ Open Space
- ■ Water

Figure 4

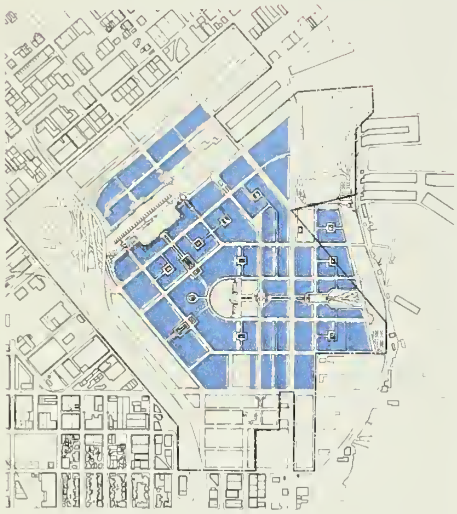
Table 1: Mission Bay Land Development Program

Housing	7,700-7,960 Units	79.1-82.3 Acres
Higher Density	3,900 units	33.1 acres
Lower Density	3,800-4,060 units	46.0 acres
Office	3.6-4.1 million sq. ft.	15.8 acres
S/LI/RD	2.3-2.6 million sq. ft.	21.0 acres
Retail	300,000 sq. ft.	at grade in other uses
Community/Cultural Facilities (including a school site)	200,000 sq. ft.**	3.7-4.5 acres*
Hotel	400,000 sq. ft. (500 rooms)	1.2 acres
Stadium	42,500 seats	11.6 acres
Open Space	--	70.1-78.3 acres**
Major Parks and Plazas	--	46.4-54.6 acres**
Recreation Facilities	--	5.2 acres**
Associated Internal to Housing (mini-parks)	--	1.8-1.9 acres
Associated Internal to Office, S/LI/R&D Uses	--	5.1 acres
China Basin Channel	--	11.6 acres
Infrastructure & Miscellaneous		
Streets and Sidewalks including Mid-Block Lanes	--	69.7-72 acres**
I-280/Caltrain Right-of-Way	--	19.6 acres
Channel Pump Station	--	2.2 acres
TOTAL	**13.3-14.3 million sq. ft.**	**294-308.6 acres**

* Achieving the higher densities depends on specifics of the zoning ordinance, development agreement and financing plan.

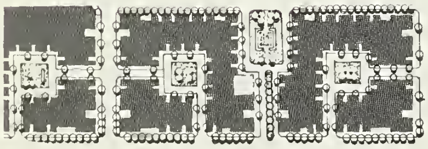
** The larger number is possible if an additional fourteen plus (14.6) acres of Port land east of Third Street between Pier 50 and 54 is included within the site boundaries. Further, additional community facilities may be developed in retail or other areas if the need develops over time.

Housing



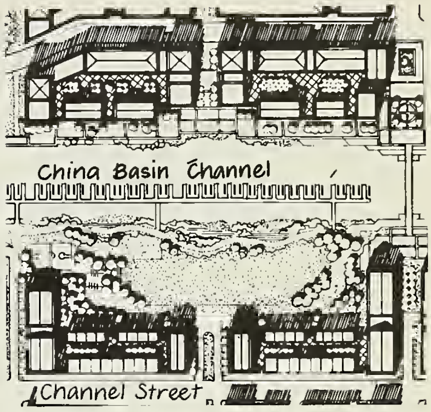
The plan will create a neighborhood by concentrating housing on 42 central blocks of this site (See Figure 14: Building Reference Plan). Other fairly high density housing bounded by Sixth, King and Fourth Streets and the Channel for up to 1,500 units can be accommodated on the six blocks north of the Channel. Here, from 110 to 165 units per acre can be provided on podium structures with some street level retail at grade and parking on the first two levels. These substantial structures will allow many residents to live on or near the Channel and the King Street transit corridor. A range of unit sizes, from studios (of about 500 square feet) to three-bedroom units (1,000-1,200 square feet per unit) will be possible in these blocks. A concentration of small elderly units would yield 210 units per acre here. Open space will be provided internal to these blocks in at-grade lanes mid-block (.2 acres per block) and on landscaped parking podium roofs (about .4 acres), primarily for residents' use. Ground floor retail and selected community facilities may occur along the sidewalks.

Additional fairly dense housing blocks, from 90 to 150 units per acre and averaging about 300 units per block, are planned along Owens and Channel Streets. Studios, one- and two-bedroom units and perhaps these bedroom units can be provided in these 12 acres (from 500 to 1,000 square feet each), with parking below and internal common open space. These podium structures covering half blocks along the Channel and whole blocks along Owens Street will form a transition zone from intensive workplaces on the perimeter of the site to the less dense central residential neighborhood.



The remainder of the housing, at an average of 83 units per acre, will be in the central blocks of the site. These will be blocks with a wide range of units per block, and first level parking and at-grade mid-block lanes with mini-parks. On these blocks, windows and building entrances will occur at frequent intervals along the sidewalk and corner convenience retail is encouraged. Studios up to three-bedroom family units can be built over structured parking at about 100 units per acre in the blocks around Crescent Park. Housing above street level retail shops with parking garages behind them is planned along Long Bridge Street at 65 units per acre. Larger floor area retail and other neighborhood-serving uses along Third Street will allow housing above. Parking along Third and Long Bridge Streets will be provided behind street-level storefronts, for those uses and the housing in each block.

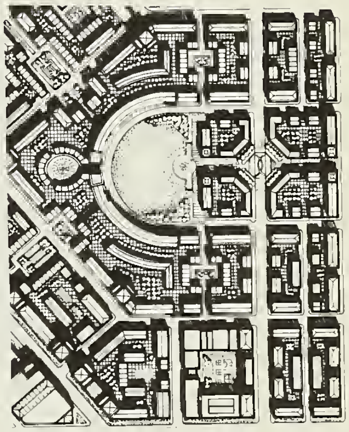
Housing sites allowing any size unit and at an average density of 83 units per acre will have the greatest flexibility. These blocks will be readily divisible into up to six development parcels. An additional block and a half of housing with 260 units can be built if the Port exchange of land described in Section 3 occurs.



Within this spectrum of blocks and densities, a broad mix of housing unit types by size, density, tenure and price will be possible, as the following analysis explains.

Housing Program Mix

The housing mix developed for illustrative purposes in the Mission Bay plan uses seven basic prototypes ranging from townhouses to mid-rise structures. Other prototypes may also meet these guidelines. Townhouses and family oriented (three-bedroom) units in three-story buildings make up approximately 1 percent of the housing. Approximately 35 percent of the housing units will be in mid-rise structures, including mixed market rate/subsidized and exclusively senior citizen housing. The remaining units are about equally divided into three-story walk-up buildings and four to five-story elevator low-rise buildings. A portion of the latter group will be in commercial-residential buildings that buffer housing units from noisy streets. The table below illustrates a Mission Bay housing program mix for a goal of 7700 units with 79 acres available for housing.



The housing program mix is determined by several factors. The first is the desire to provide the maximum number of units while at the same time assuring diversity and a pleasant livable environment--at an average housing density of approximately 97 units per acre. About 7,700 housing units can be provided on 79 acres, and 7,960 units in 82 acres. This is high for a San Francisco neighborhood (See Appendix 2 for densities in selected San Francisco neighborhood) and limits opportunity for lower density housing prototypes (such as townhouses). Higher density housing blocks will also require more podium-level development which eliminates mid-block lanes and at-grade open space internal to the residential blocks. Densities could be lowered but this would reduce the unit count. Alternatively, densities could be increased on some lots by building residential buildings over eight stories (they could be built more economically) but that would deviate from the eight-story height limitation on the site.

Table 2: Potential Mission Bay Housing Mix

Type	Density du/ac	# of Units	% of Units	# of Acres
Townhouses	45	45	.1%	1
Large Household Walk-up	55	840	10.9	13
Comm/Residential buffer	65	1151	14.9	17
Three Story Walk-up	85	1250	16.2	14
Four/Five Story Elevator	90	1872	24.3	20
Mid-Rise mix	165	1905	25.0	11
Mid-Rise senior	210	640	8.3	3
TOTAL		7703	100.0%	79

Notes:

1. An additional 260 units like the others east of Third Street can be built on land south of the wetlands/playfields if the Port exchange described in Section 3 occurs.

2. Acreages are estimates; more than one unit type may occupy the same acreage.

3. This mix is one possible scenario.

The second factor influencing the housing mix is the relatively poor soil conditions on site and thus fairly high foundation costs. For much of the site, the lowest foundation costs per unit are for mid-range density three to five-story buildings. This suggests that more affordable housing can be built at mid-range densities not higher.

An average unit size of 850 square feet will provide a reasonable mix for the development. This will be a larger average unit size than some recent downtown fringe projects such as St. Francis Place or Opera Plaza, but smaller than average unit size in new luxury housing. A unit mix that would generate a 850 square foot average is shown in the following table. This distribution would result in 25 percent of the units of at least 1100 square feet, a considerable amount of potential family housing.

Table 3: Potential Housing Mix by Unit Size

Unit Size		Proportion of Units
500 sq. ft.	Studio	15%
650 sq. ft.	Studio/1 Bedroom	25%
850 sq. ft.	1/2 Bedroom	35%
1100 sq. ft.	2/3 Bedroom	15%
1500 sq. ft.	3/4 Bedroom	10%

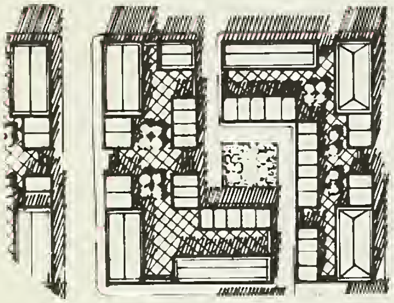
Note: This mix is one possible scenario.

Source: Housing Mix/Finance/Building Prototypes Special Study, September 1986

Consistent with the policy of providing a significant diversity of housing opportunities, the Mission Bay development should provide housing opportunities for both owners and renters. The San Francisco housing stock is approximately 65% rental, although new housing constructed in recent years has been for purchase. Rental housing fulfills a need for those households that cannot afford a down payment, are transient, or have other reasons for not seeking to buy housing. Higher priced housing tends toward ownership units, and affordable housing and lower amenity units tend toward rental tenure. A mix that has 30 percent of market rate units and 60 percent of affordable units as rentals would result in 40 percent of all Mission Bay housing available for renters, assuming that 30 percent of Mission Bay housing is affordable. The housing program mix will be negotiated as part of the development agreement.

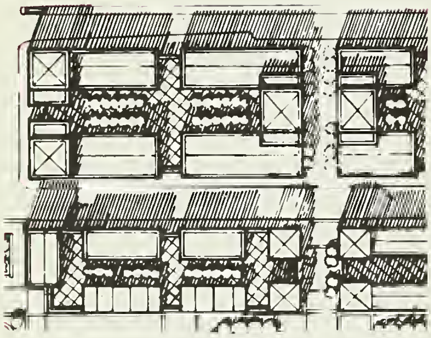
Household Mix

The housing mix developed for Mission Bay should result in approximately two persons per household average. This is based on the mix of units by unit size and calculated averages of persons per household for both market rate and subsidized units. Table 4 shows a mix of units by unit size and type, with associated average household size. Each prototype will be oriented to particular elements of the housing market. As an example, townhouses and larger walk-up units attract larger households, such as families with two or three children, or extended family households. Such housing will constitute the largest average unit size among Mission Bay household types, and such housing is more likely to be owner occupied.



Housing built over a commercial base that serves as a buffer will tend to be smaller units. Singles, couples, and seniors will be the predominant residents, and such housing will more likely be rental. The remaining low-rise prototypes will provide a diversity of housing opportunities in wood frame construction, most likely built over concrete garages. Households will include singles, couples, roommates, and smaller families, and average unit size will be in the 800-900 square foot range.

Mid-rise housing will offer generally smaller units, with the exception of some larger luxury units that could be provided in buildings with panoramic views and other special amenities. Singles, couples, and older couples (empty nesters) will be the primary market segments for such housing. Unit sizes will include higher proportions of studio and one bedroom units, and tenure will be mixed but will favor condominium units. Finally, mid-rise senior housing could provide higher densities within the height limit by using smaller units with less parking. Congregate or group housing facilities, or "life care housing" might fit within this prototype. Unit sizes will be small, and tenure will be rental.



The primary market for Mission Bay housing in the early development years will tend toward singles and younger couples who are willing to gamble on a pioneering neighborhood. As perhaps 1000 to 2000 units will be developed in addition to open space, job opportunities, and retail facilities, a broader spectrum of households including older couples moving into smaller units and families will be more inclined to choose Mission Bay as a neighborhood. Good weather and good transit will be inducements to the area for elderly residents and all household types once the area has supportive services.

Affordable Housing

The affordable housing programs and demand for affordable housing in the City are such that when affordable housing is subsidized sufficiently, whatever is built will be occupied. One of the goals for the Mission Bay housing affordability program is to maximize opportunities for those employed in Mission Bay to live in the community. The amount of subsidy required to assist a moderate income household ($27,500-39,000 income depending on number of people) or a middle income household ($34,000-49,000) is not large for smaller households in smaller units, but is more substantial for larger families (see Appendix 3). The cost to provide a new housing unit increases with unit size and the larger the unit the greater the gap between its cost and what a household is able to pay. Consequently, within any income level the larger the unit, the lower the percentage of its cost that can be covered by household income, and the greater the amount of subsidy needed to make up the unit's cost.

A program established to make 30 percent of Mission Bay housing being affordable will produce 2311 affordable units. Forty percent affordable units would result in 3081 such units. The cost of the subsidy program will depend as much on the level of subsidy (for low, moderate, middle income, etc.) as the number of units to be subsidized. It will be more difficult to make Mission Bay housing affordable to low ($18,000-26,000) or very low (less than $18,000) income households, and concentrating on this group would reduce the number of households that could be subsidized. Land price is a factor in the cost of the subsidy program; generally the lower the assumed land value, the greater will be the amount of subsidized housing that can be provided for a given amount of funding.

The affordable housing will be mixed in with market rate housing, with the possible exception of senior housing that can be built separately with smaller, less expensive units. The plan component in Section 5 addressing housing opportunities provides information on likely sources for housing subsidies. The affordable housing program will be resolved in the course of development agreement negotiations.

Table 4
Mission Bay Housing Program

		Unit Size							Affordable			Market Rate			
Type	Density	500	650	850	1100	1500	Total Units	Average Sq. Ft.	Percent	Total Number	Percent Rental	Percent	Total Number	Percent Rental	Average Household Size
Townhouse (luxury)	25														
Townhouses	45			110	228	130	468	1152	40.0%	187	20.0%	60.0%	281	15%	2.96
Family Walk-up**	55	20	80	225	225	150	700	1037	31.7	222	20.0	68.3	478	20	2.51
Comm/Res. buffer	65	180	320	320	151	40	1011	787	33.0	334	60.0	67.0	677	35	1.94
3-Story Walk-up	85	40	260	562	155	90	1107	878	28.9	320	45.0	71.1	787	25	2.12
4-Story Elevator	90	170	600	630	270	202	1872	860	18.0	337	50.0	82.0	1535	30	1.96
Mid-Rise	165	350	430	840	130	155	1905	810	14.2	271	65.0	85.8	1634	35	1.83
Mid-Rise Seniors	210	400	240	—	—	—	640	556	100.0	640	100.0	0.0	0	0	1.47
		1160	1930	2687	1159	767	7703	850	30%	2311	61%	70%	5392	29.7%	2.02
		15.1%	25.1%	34.9%	15%	10%									
Persons/Household															
- Market Rate		1.10	1.40	1.90	2.60	2.60									
- Affordable		1.30	1.75	2.60	4.20	–									

Average Unit Size = 850 sq. ft.
Num. Rental Units = 3015
Total Population = 15,548
Acres = 85
Average Units/Acre = 91

**Family units are similar to 3-Story Walk-up units, but larger and lower average density.

Note: This data is based on a target of 7700 units with a full range of housing types. It represents one possible housing program scenario. The housing program will be resolved during the negotiation of the development agreement.

Citywide Housing Needs

The 1984 Housing Element estimated citywide housing needs for the period 1980-90. It estimated a need of 14,833 units of newly constructed housing of the following types:

Table 5: Estimated Citywide Housing Needs 1980-1990

Tenure	
renter occupied	66%
owner occupied	34%
Income Distribution	
very low income	13%
low income	10%
moderate income	32%
above moderate income	45%
Unit Type	
single-family	52%
multiple unit	48%

In 1981 the San Francisco Citizens Housing Task Force estimated the size of dwelling units needed annually in San Francisco as follows:

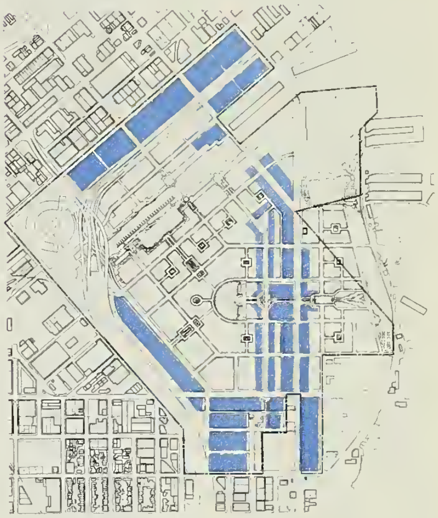
Table 6: Dwelling Unit Sizes Required Annually San Francisco 1980 - 1989

Studio	10%
1-Bedroom	40%
2-Bedrooms	30%
3 + Bedrooms	20%
	100%

The City's needs are generally not fully reflected in new private housing developed in San Francisco, due to the costs of new construction and market considerations. The City must also rely on a variety of means including renovation of existing buildings to address these needs. However, these estimates provide some benchmarks to measure the extent to which the Mission Bay housing program is responsive to citywide housing needs.

Commercial

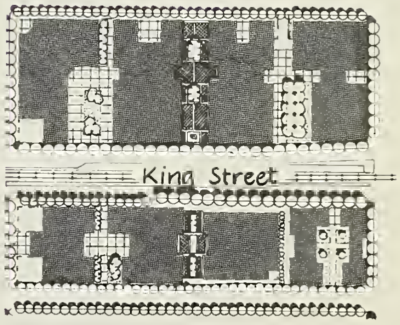
Following are descriptions of the office, service/light industrial/R&D, retail and hotel land uses. These represent the primary workplace sites in Mission Bay and are the major sources of employment in the development program. Along with the description of the location and character of each use, a recommended program is cited.



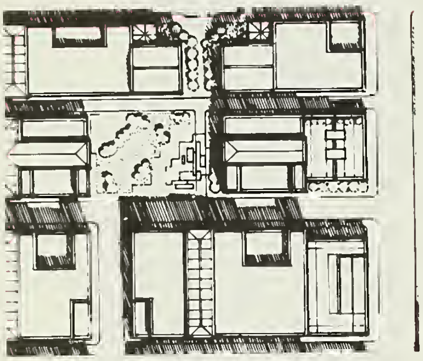
Office

Office buildings intended for secondary office activities will be along King Street on the three blocks between Townsend and King Streets and on the block bounded by Townsend, Third, King and Fourth Streets. Between 3,600,000 - 4,100,000 square feet are feasible on the 18.6 acres in these four blocks. Between 1,000,000 - 1,200,000 square feet can be built in the blocks between Townsend and King Streets, compatible with South of Market mixed uses and adjacent high density residential development across King Street. About 600,000 square feet can be built on the fourth block. San Francisco mid-rise office building examples are in Appendix 2. Achievement of the higher densities in these ranges depends on specific provisions of the zoning ordinance, development agreement and financing plan. All four blocks will accommodate open office floors for multiple tenant floor plans, making this space suitable for secondary office.

The plan encourages street-level floor retail, restaurants and services along sidewalks in all office blocks. Structured parking is also planned on the first and second floors of some office buildings. Otherwise, parking for office workers will be in separate parking structures. About 7,500 square feet of publicly accessible open space is internal to each block.



The plan recommends that at least 3,600,000 square feet of office be built in this area. Additional office space, bringing the total to about 4,100,000, could be built here within the eight-story height limit, depending on various factors to be resolved in the Mission Bay zoning ordinance and development agreement. One factor is a possible change in the parking ratio. With 3,600,000 square feet of office space, one parking space per 1000 square feet will be feasible, resulting in 3,600 spaces occupying at least 1,080,000 buildable square feet. For 4,100,000 square feet of office space, parking at one space per 1,400 square feet (2,930 spaces) could be provided, permitting about 201,000 square feet of parking area to be converted to office square footage.



Service/Light Industrial/Research and Development

Acreage for service/light industrial/research and development (S/LI/RD) is planned along Owens Street and south of Sixteenth Street. At least 2,300,000 square feet of leasable area are recommended on 21 acres for these uses. The parcels are itemized below:

West of Owens	7 acres (925,000 sq. ft.)
Southwest of Owens and Sixteenth	1 acre (45,000 sq. ft.)
Between Owens, Sixteenth, Third and Mariposa	9 acres (900,000 sq. ft.)
South of Sixteenth between Third and Illinois	4 acres (400,000 sq. ft.)

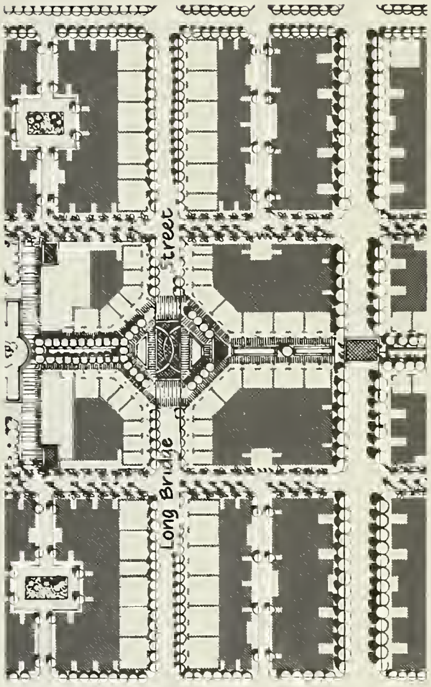
The 2,300,000 square feet can be accommodated on these sites with parking spaces at a ratio of 1:1000 square feet. Additional S/LI/RD space can be built, about 2,600,000, with a 1:1400 square foot parking ratio. Taller buildings with five rather than four stories south of Sixteenth Street and four- rather than three-stories east of Third Street would be required to achieve 2,600,000 square feet on the available land. Achieving such space would depend on resolution of the parking and other issues in the Mission Bay zoning ordinance, development agreement and financing plan.

These S/LI/RD uses are located on the perimeter of the housing area where they are most economically viable and where they can serve as an intervening use between the I-280 freeway structures, mixed uses to the south, and the Mission Bay neighborhood. No heavy manufacturing or hazardous/toxic waste activities will be permitted, thereby minimizing health and safety risks to workers or nearby residents. Live-work space will be possible within these areas. The location of truck loading routes and docks and truck movements will be restricted to avoid conflicts with pedestrian circulation in these areas and any peak traffic conditions.

Internal to S/LI/RD sites, open space areas are designed for active use by the working population. Associated uses on the several sites, such as ground-floor convenience retail or cafes, will contribute to these working environments.

Retail

Retail demand for Mission Bay sites generated by site workers and residents will range from 184,000 to 219,000 square feet. Additional spending by the larger market area, primarily citywide, may range from 35,000 to 150,000 square feet. (These conclusions are preliminary and will be the subject of further analysis in the EIR). This wide range of possible retail square footage (from 220,000 to 330,000) will primarily be consolidated along Long Bridge Street to create the critical mass for a central neighborhood commercial area. In this area, small-scale sales and services will be provided on small parcels fronting the street.



The mix of retail sales and services desired along this street will be that permitted and currently found in several existing neighborhood commercial districts. The mix will include a variety of neighborhood serving uses such as a hardware store, shoe repair shop, laundry, drugstore, butcher, produce store, restaurant, bar, clothing store, liquor store, video and/or record and tape store, and delicatessen. Pedestrian circulation will be encouraged and adequate parking will be available, both on-street and in adjacent parking structures. Along Third Street, personal services, fast food restaurants, movie theaters, financial services, business or professional services and large-scale retail uses will be permitted. Remaining retail square footage will be clustered in the ground floor of office and housing areas north of the Channel to serve those workers and residents, and in convenience retail scattered throughout the residential areas south of the Channel.

Retail shops will be planned for Muni Metro stops and at the Caltrain station to provide transit riders with convenient shops and services. An approximately 40,000 square foot site is suggested for a supermarket at Third and Sixteenth Streets.

This retail activity contributes to the commercial resources available to nearby areas. The closest supermarket is at Potrero Avenue and Sixteenth Street. A Mission Bay supermarket could serve Potrero Hill, the South of Market, Lower Potrero Hill and the South Bayshore area. The retail street will supplement the Potrero Hill retail area on Eighteenth and Twentieth Streets, providing additional opportunities for Potrero Hill residents. On occasion it will attract other visitors citywide, as do other San Francisco neighborhood shopping streets. San Francisco retail comparisons are in Appendix 2.

Hotel

A hotel, planned for 500 rooms plus associated meeting rooms and dining facilities, will be north of the Channel next to Fourth Street. Shopping and entertainment uses of the hotel will contribute to the activity expected on the adjacent Channel Plaza. Associated parking will be structured below housing on the adjacent housing block. San Francisco hotel comparisons are in Appendix 2.

Citywide Employment Benefits

San Francisco, although historically the region's leader in business activities and employment generation, must continue to grow economically and diversify its economic base. This is essential if current and future generations of San Francisco residents are to anticipate maintaining or improving their standards of living. For those San Francisco residents currently economically disadvantaged, sustained economic growth offers opportunities for social mobility that are not possible in an economically stagnant environment.

Mission Bay represents a unique opportunity to expand and diversify San Francisco's employment base. The strengths of Mission Bay's location and the competitive market niches it could realistically serve would help:

- Draw new jobs to the city by providing mixed commercial use opportunities in San Francisco
- Provide an alternative competitive "back-office" location for firms considering relocation out of the City
- Allow San Francisco firms to consolidate inefficient uses of space and thereby open possibilities in other areas of the city
- Absorb a share of the growth in new enterprises
- Expand the diversity of employment opportunities available within the city.

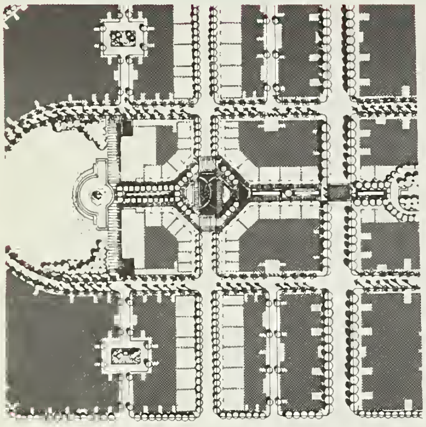
About 45 acres will be provided in Mission Bay for between 5,900,000 to 6,700,000 square feet of employment in office, S/LI/RD, retail and hotel uses. Secondary office space complementary to downtown primary office space on four office blocks north of the Channel will offer flexible floor plans that can be adapted by a variety of businesses. About 13,000 jobs could be accommodated in this space. Service/light industrial/R&D areas east of Owens Street and south of Sixteenth will have jobs in such sectors as wholesale trade, business and other services, transportation, utilities, communications, research and development, light manufacturing and large-scale retail. Light industrial land is also the typical location for incubator or innovative economic activities. About 7,000 jobs could be generated from this variety of businesses. Industrial buildings frequently can be adapted as live/work sites although market rents may discourage such use.

In addition, about 1,500 jobs will be in proposed retail space, 500 at the hotel and 35-65 more associated with open space maintenance and parking facilities. Thus, Mission Bay would generate the space and facilities for about 22,000 permanent employees. Mission Bay will also generate approximately 14,000 person years of employment in the construction trades, an equivalent on an annual basis of 600 full-time jobs, filled by many more than 600 people. A summary of present estimates for employment at Mission Bay and the annual increase is shown below.

Table 7: Estimated Permanent Employment, Mission Bay

Type of Employees	Total Employment at Buildout				Average Annual Increment			
	Office	S/LI/RD	Retail	Hotel	Office	S/LI/RD	Retail	Hotel
Managers and Officers	1,859	442	132	20	81	19	6	1
Professional Occupations	3,665	649	44	35	159	28	2	2
Technical Occupations	1,217	186	0	0	53	8	0	0
Sales Workers	694	290	731	15	30	13	32	1
Service Occupations	119	532	292	415	6	23	13	18
Production Occupations	471	3,744	58	0	20	163	3	0
Admin Support and Clerical	5,066	1,064	205	15	220	46	9	1
Subtotals	13,091	6,907	1,462	500	569	300	65	23
Construction Trades	14,000 person years				600 employed positions/year			

Note: These are preliminary employment estimates which are subject to reevaluation and change during the course of environmental impact report analysis.

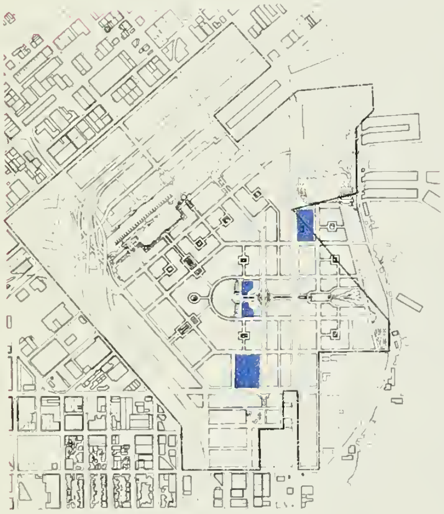


The space at Mission Bay will be attractive to firms currently in the City and firms outside the City. Although providing offices and industrial space will not by itself create new permanent employment, it will provide space for some of the City's projected growth in employment and the opportunity for firms to expand and/or relocate in San Francisco.

Many jobs at Mission Bay will not be new. The firms that locate in Mission Bay will include existing businesses that already have a work force and will be merely transferring their personnel. The City needs this additional space to accommodate the growth in employment and to allow existing firms an option of staying in the City. The space from which such firms relocate will become available to other existing or emerging San Francisco businesses.

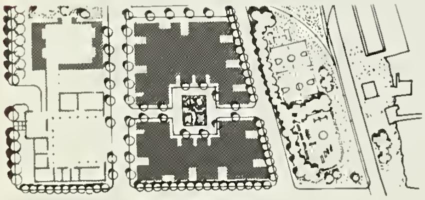
New employment opportunities will arise at Mission Bay after it is fully occupied. Every year from seven to ten percent of the existing jobs will turn over because of retirement, promotions and many other reasons. Thus, Mission Bay job turnover should exceed 2,000 jobs per year at project buildout.

Community and Cultural Facilities



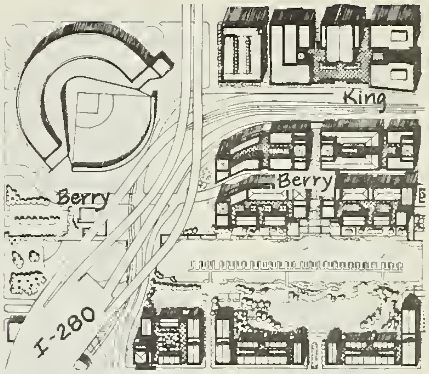
A neighborhood center and cultural facility on about 40,000 square feet in two handicapped-accessible buildings is planned for the community center between Crescent Park and Long Bridge Street. Community meeting rooms, a sub-branch library, offices for health and social services, child care and other community activities can be accommodated within one of these buildings. As appropriate, a performing arts center or theater could be in the other. A gymnasium possibly could be located here although the area adjacent to the wetlands and playing fields is a preferable location.

About 25,000 square feet of community services such as child care can also be accommodated in residential or commercial buildings around the site, located for proximity to persons using the services and nearby open space. Both market-rate and subsidized child care (including infant care) will be required. The Department will refine the space requirements for such uses during the next phase of work. Churches are a possible use at one or more corners in the residential blocks. Recycling facilities can be provided in several parking-stall-sized spaces within the neighborhood convenient to the community, and perhaps at one larger recycling center.



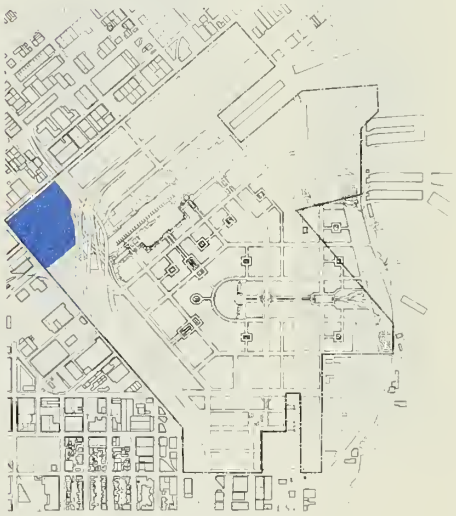
A school site (about two acres) is provided at Indiana and Sixteenth Streets. The site would be reserved for 20 years or more for a school to serve the educational needs of a developing Mission

Bay community. School athletic facilities, including a gymnasium if a middle school were developed, would be available to the community outside school hours.



Up to 60,000 square feet for fire and police will be accommodated in and surrounding the existing fire station building at 1300 Fourth Street. Expansion at this location will make these services readily accessible to Mission Bay residents and employees. Also, the Third Street location makes them available for emergencies in surrounding areas. They would be combined with recreational building of about 25,000 square feet to be used by the neighborhood and citywide residents. An Olympic swimming pool facility could be adjacent to the wetlands park and playing fields, or as an alternate use of the school site or a portion of the ballpark site if these other uses are not implemented.

Ballpark



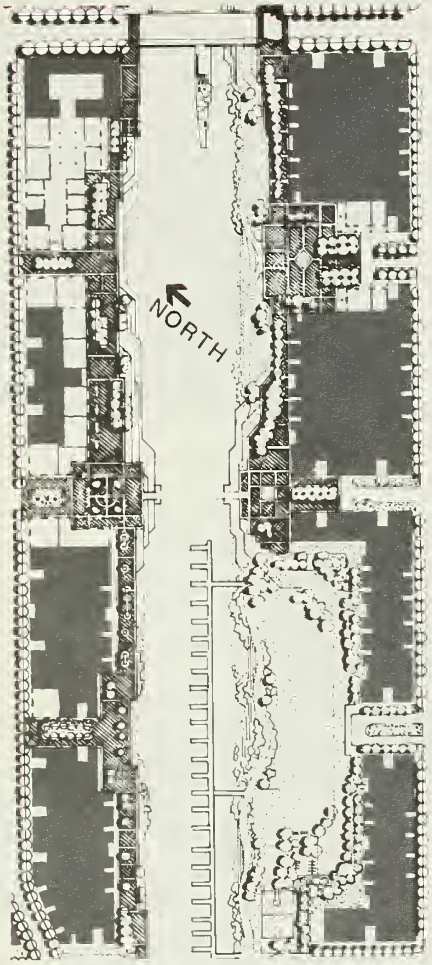
The Seventh and Townsend corner could be the site of the San Francisco ballpark. This parcel is relatively isolated from other portions of Mission Bay, in an area planned to be well-served by transit and able to accommodate a sports facility. Its proximity to office and light industrial parking structures enables joint parking use, an efficient arrangement benefitting both Mission Bay and the ballpark.

5.3.2 Open Space Element

The Mission Bay plan will include private and public open space. Private open space will be provided internal to residential blocks for residents' use. The public open space will take many forms and will be distributed throughout the site. All housing will be within 2-1/2 blocks of a significant park, and within five blocks of the Channel or Bay. The 70 acres of open space in the plan represents a substantial amount of open space accessible to Mission Bay residents and workers, and other San Franciscans. It will be linked with the site's landscaped streets and will be accessible to all age levels and the physically disabled. It joins with the water around the site, to create very special parks for both the neighborhood and city. See Figure 5.

Parks, Plazas and Recreation Areas

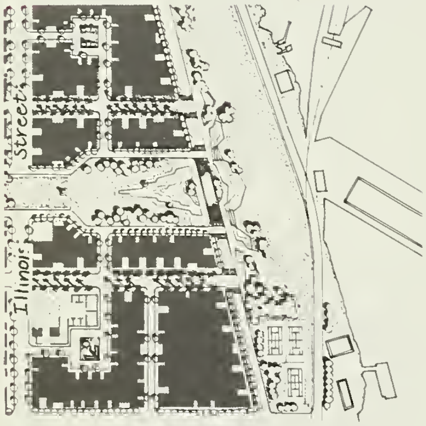
The open space system provides a continuous connection from China Basin Channel through the neighborhood to the San Francisco Bay shoreline. At the Channel, open space along the Fifth Street corridor focuses on the Channel. On the north edge,



the terraced Channel Plaza between Fourth and Fifth Streets will sculpt the Channel and make areas available in front of the housing and hotel for gatherings of many types. The plaza will be an average of 100 feet wide and 900 feet long. To the west between Fifth and Sixth Streets is Channel Green, a softer park more oriented to residential use but continuing the urban promenades along the edge. The park will continue under the freeway to the Channel end and Seventh Street.

Adjacent to the houseboat community on the south side will be an expansive softly-landscaped area of about three acres for relaxation and recreational use. It will include picnic areas, playing courts (e.g. basketball, skateboard) and informal playfields. Between Fifth and Fourth Streets is a narrower but more active landscaped edge. This will make the Channel shoreline accessible within a park area which at its southeasterly edge abuts retail uses with housing above. Not as teeming with activity as the plaza immediately across the Channel to its north, it will nevertheless be a busy gathering place for the central neighborhood at the water's edge. The north and south sides of the Channel will be connected by a pedestrian bridge at Fifth Street, movable so as to retain navigability within the Channel, to supplement the sidewalk on the drawbridge at Fourth Street.

There will be ready access from the Channel areas into the central neighborhood. From the larger westerly area, a greenway extends to a small park surrounded by housing, then continues on a pedestrian-oriented lane to Crescent Park, the neighborhood's central park. The open space between Fifth and Fourth Streets will also be linked by a greenway between housing to the top of the bustling neighborhood retail street. Unlike the westerly connection, however, which emphasizes a contemplative pathway, this will be an intensely used, very active parkway with a small triangular park incorporating outdoor cafes and window shopping, an ever popular form of urban recreation.



Crescent Park will be a flat lawn and landscaped area where informal recreation or passive enjoyment of the outdoors can occur. Its expanse of open space, surrounded by housing and community facilities, is expected to be a well-used central neighborhood park. At Crescent Park a dramatic series of landscape and water elements leading to the Bay shoreline will begin. The park will contain a fountain at its east end adding civic beauty to this neighborhood feature and continuing the Channel Park theme of water joined with open spaces. The series of landscaped areas with water elements will move from this park where a major water feature is planned, through the neighborhood

Open Space Element

Mission Bay

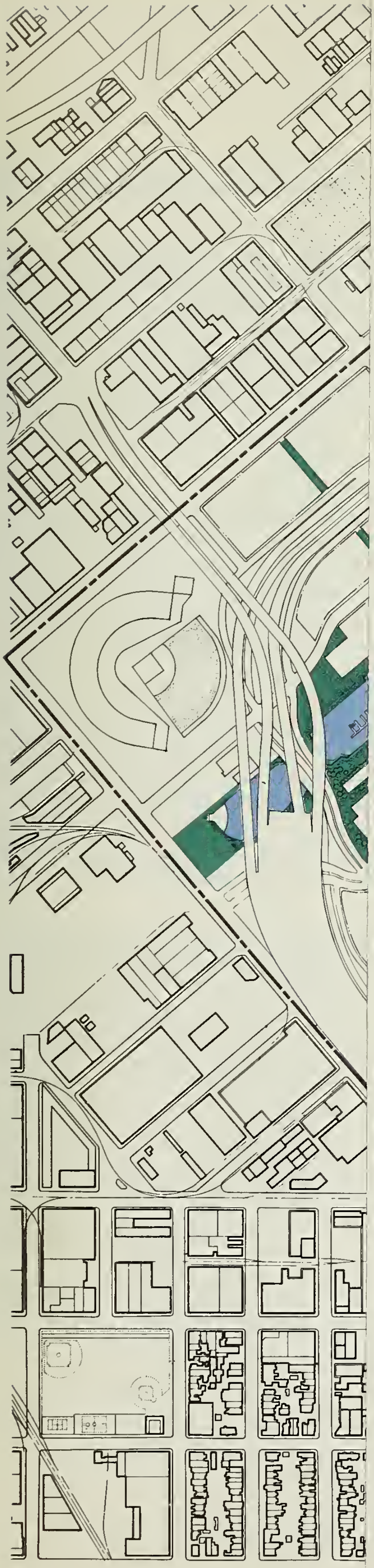


Figure 5

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200'
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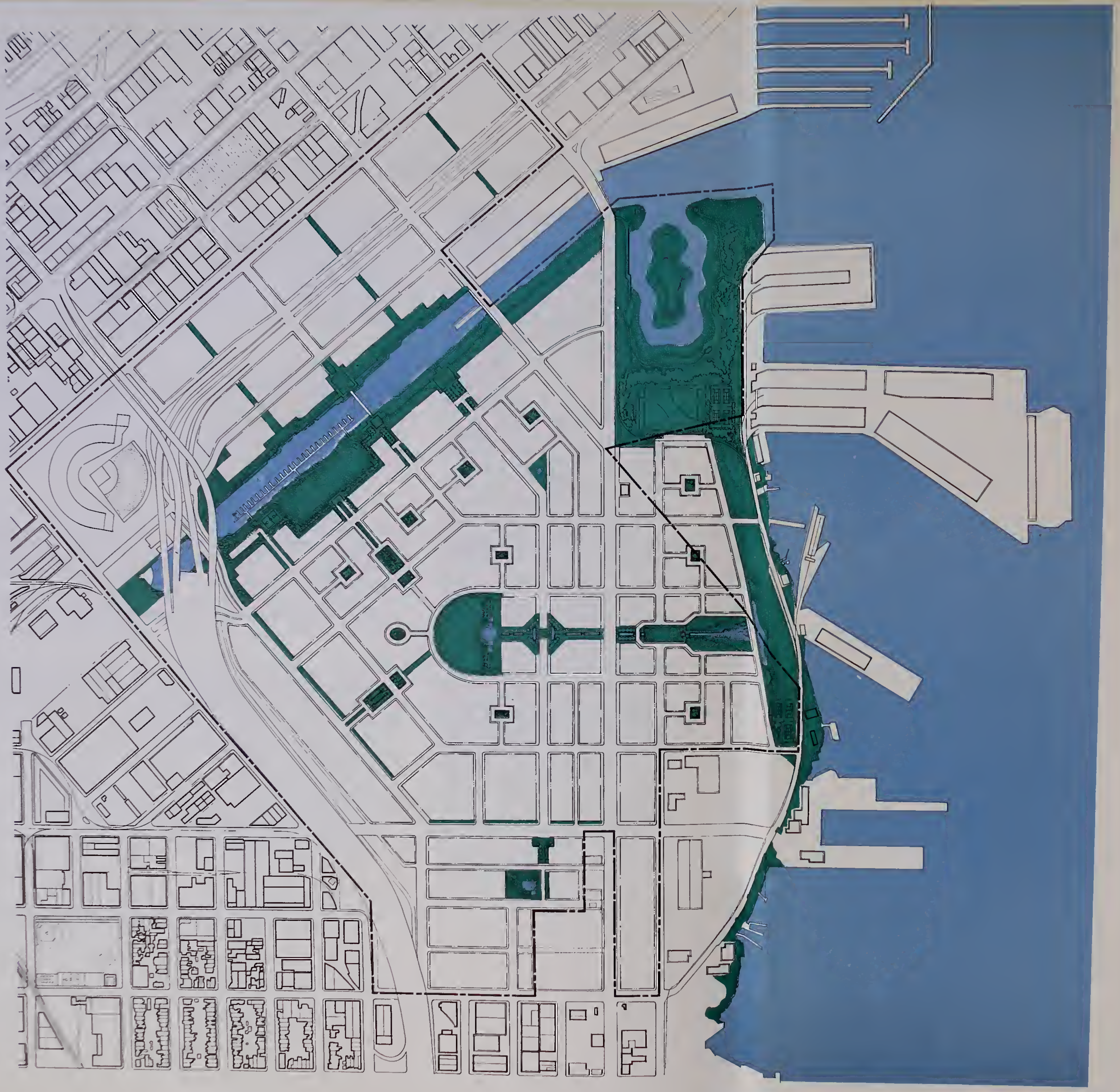
Open Space Element

Mission Bay


0
200'
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NORTH

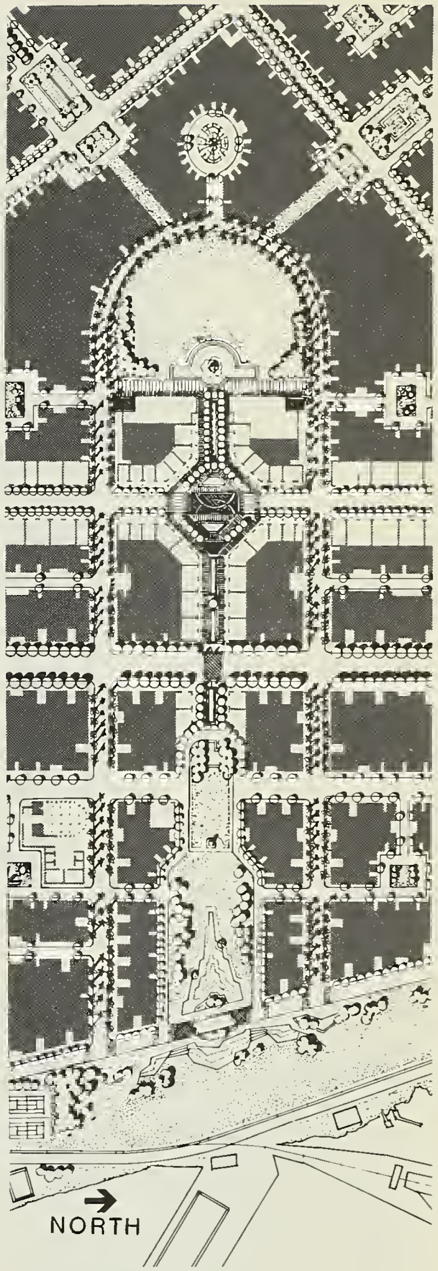
Figure 5

center at Long Bridge Street and continue through housing blocks in an ever-widening corridor to the Bay shoreline. Each space in the blocks along the way is intended as a distinct and attractive place. As this corridor approaches the Bay, it will widen to expand views of the Bay, and the landscaped areas will become larger and more able to accommodate various activities. In the last block at Fountain Park, the corridor will be 200 feet wide and include a spectacular landscaped fountain.

A traveller crossing Mission Bay Street at this fountain will continue around a long sculpture terrace containing falling water at various levels, and then be directed onto Mission Bay Green, a large 10-acre Bay shoreline park. At this shoreline park, there will be ample open space for a wide variety of activities. This includes a wide green expanse for informal play, three tennis courts and places to overlook the Bay and its maritime activities.

North of this park will be a 13-14-acre wetlands habitat with islands, marsh vegetation, mud flats and waterways for waterfowl and shorebirds. About five acres adjoining the habitat is planned for athletic recreation facilities for both Mission Bay and citywide residents. The facilities include two softball fields combined with a football/soccer playing field, and four tennis courts. There will also be a gymnasium or Olympic-sized swimming pool facility at this site, next to Third Street.

The open space and street systems together enable people to move through a series of urban and more bucolic places across the site. Ample walking circuits or jogging routes are provided through the open space system. One such open space loop would be from the China Basin Building around the Channel to the Owens and Sixteenth Street pathways, then to Mission Bay Green, from there to Crescent Park and back to the Bay, then to the Wetlands Habitat, and from there back to the beginning via the pedestrian bridge. This would run about 4 miles (six kilometers) and connect with jogging opportunities along The Embarcadero. Similarly, bikeways connect through the site and its open space areas.



Open Space Program

The acreages associated with the variety of public open space areas and recreation facilities are set forth below.

Table 8: Mission Bay Recreation Facilities

Athletic Facilities	Number	Number/ Residential Population
Football/Soccer	1 field	1: 15,400 persons
Softball	2 diamonds	1: 7,700 persons
Tennis	7 courts	1: 2,200 persons
Basketball/volleyball/ handball	5 courts	1: 3,080 persons
Gymnasium	1	1: 15,400 persons
Recreational Facilities		
Playgrounds	4	1: 3,850 persons
Tot Lots	12	1: 1,280 persons
Skateboard Court	1	1: 15,400 persons

Note: Appendix 2 provides citywide facility to population comparisons.

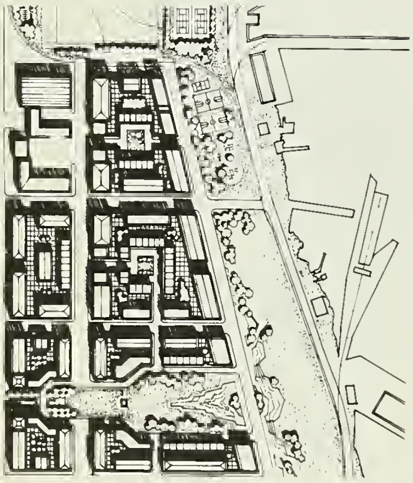
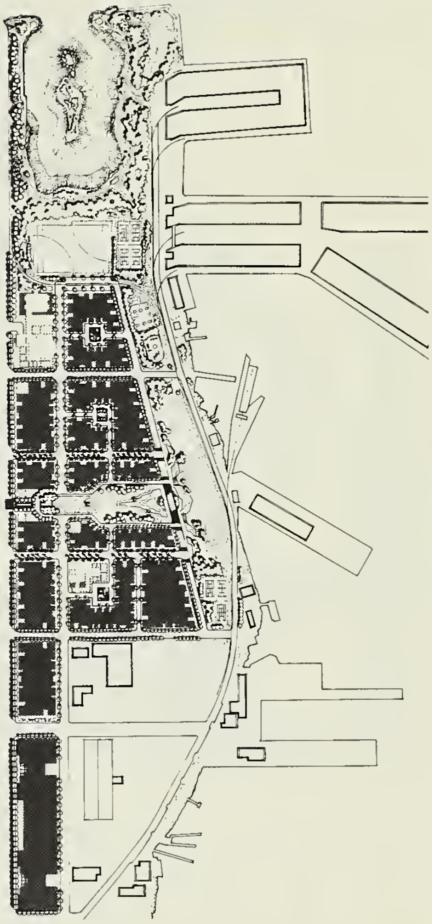


Table 9: Open Space Internal to Other Uses, Mission Bay

Housing	1.8 acres
Office	2.8 acres
S/LI/RD	2.1 acres

Table 10: Public Open Space Areas, Mission Bay

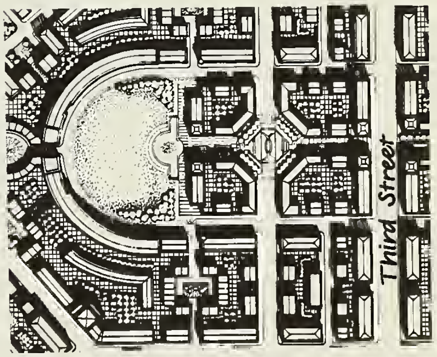
Crescent Park	3.5 acres
Long Bridge Plaza	0.5 acres
Fountain Park	2.2 acres
Mission Bay Green	1.7 acres*
Mission Bay Athletic Fields	3.3 acres
Wetlands Habitat	13.5 acres
Mission Point Park	2.0 acres
Channel Plaza (North & South)	10.4 acres
Channel Green	3.0 acres
China Basin Channel	11.6 acres
Triangle Plaza	.4 acres
Minnesota Park	.9 acres
Park North	.3 acres
Park South	.3 acres
Streetside Jogging Path	1.1 acres
Mini-Parks or Housing Alleys	2.1 acres



*An additional 8 acres extending as part of the Mission Bay Green north to the wetlands/playing fields would be developed as shoreline park if additional land east of Third Street immediately below the wetlands/play fields were acquired from the Port as part of the Mission Bay neighborhood.

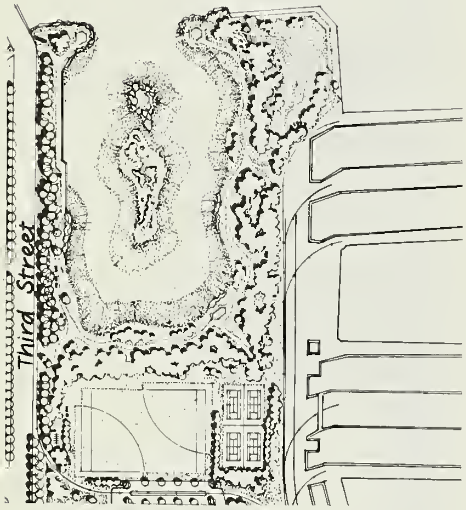
Note: Appendix 2 provides comparisons to existing San Francisco parks.

Citywide Open Space Benefits



The City has never fully capitalized on opportunities for parkland on its eastern shoreline. Most of the eastern shoreline was developed before significant efforts were made to set aside park lands in the City. San Francisco's eastern shoreline has much warmer weather than Ocean Beach or the Presidio, yet only in the past decade have parks been created here. Now a significant stretch of this shoreline will be reserved for public use as a park.

The eastern part of the city is deficient in other open spaces as well. The South of Market, North of Market and Chinatown/North Beach/Nob Hill areas are designated as High Need Neighborhoods, which should receive priority for new parks and recreation improvements. The South of Market area in particular will benefit from additional recreational opportunities in Mission Bay parks and athletic playfields. The major park system at Mission Bay will continue the open space efforts to the north within the South Beach and Rincon Hill areas, and Port efforts such as the pedestrian waterfront promenade south of the Ferry Building. These major shoreline features will orient the more urbanized areas of the City towards the water, a relatively untapped resource, in one of the warmest parts of town. With its excellent transit access by Metro and other lines, Mission Bay will also offer open space amenity for workers downtown.



The City's eastern shoreline formerly had many marsh areas. All other marsh areas are now gone as well, although potential restoration is proposed at Candlestick Shoreline Park, Pier 98 and perhaps Crissy Field. Mission Bay will reestablish a viable wetlands habitat at the site's most water-oriented location, the confluence of China Basin Channel and San Francisco Bay. Such a natural wildlife area, in a fully accessible urban setting, will be of great educational value in recalling images of San Francisco's natural history.

China Basin Channel itself--the last remains of both Mission Bay and the Mission Creek which contributed fresh waters to the bay--is a city amenity known primarily by houseboaters and their friends and associates. The expansive sheltered shoreline park and promenade along the banks of the Channel will establish a close, intertidal relationship with the water, thus adding new recreational opportunities for the City.

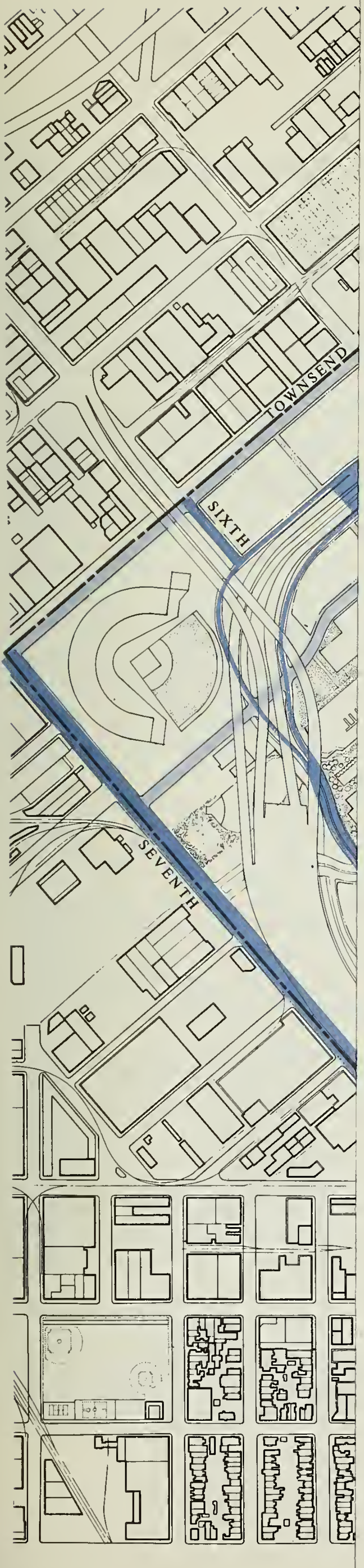
Mission Bay recreational resources will be important for the placement of relatively natural open spaces adjacent to the most densely developed and most visited area in the region. They will provide a pervasive sense of nature in contrast to the urban densities around them.

5.3.3 Circulation Element

The Mission Bay Circulation Element accommodates all modes of travel emphasizing the importance of public transit, pedestrian and bicycle circulation. The plan's superior transit service and comprehensive network of pedestrian and bicycle routes reduces the land in the project which has to be dedicated to streets and parking areas. The Mission Bay street system will operate at traffic levels similar to other streets in the central area. The plan is fully in accord with the "transit first" policy of the City. (See Figure 6.)

Circulation Element

Mission Bay

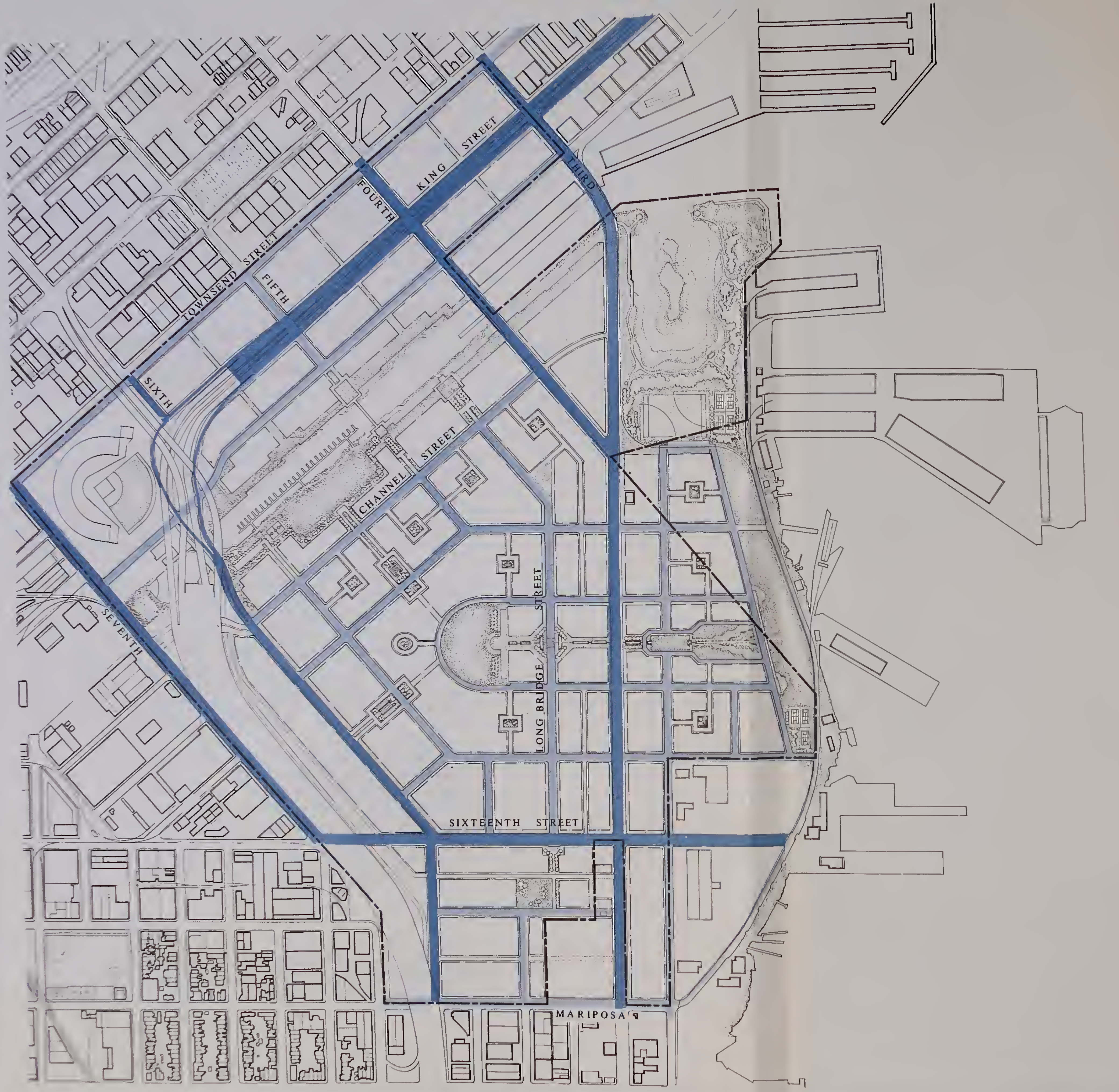

TOWNSEND
SIXTH
SEVENTH

Primary Streets

Secondary Streets

0
200'
1000'
NORTH

Figure 6


KING STREET
THIRD
FOURTH
TOWNSEND STREET
FIFTH
SIXTH
CHANNEL STREET
SEVENTH
LONG BRIDGE STREET
SIXTEENTH STREET
MARIPOSA

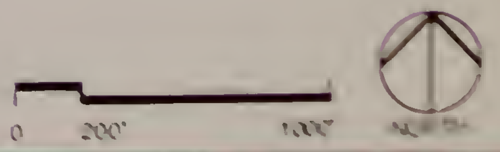
Circulation Element

Mission Bay

▬ Primary Streets

▭ Secondary Streets

Figure 6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NORTH

A number of regional and local transportation systems, including roadway, freeway, and transit in and around the Mission Bay project area, will require reconstruction as part of the project. These projects will affect access to regional as well as local transportation corridors, and will require close coordination of planning and design.

Mission Bay workers and visitors have different travel needs for different trip purposes. In order to create a desirable living, working, shopping and recreational environment the plan accommodates their travel needs in a safe, convenient and inexpensive manner.

Transit

Mission Bay residents, workers and visitors need transit for trips to downtown and other San Francisco destinations, and to connect with regional transit services to other Bay Area locations. The Mission Bay plan proposes an expansion of public transit routes to make such trips possible. These proposals are subject to further analysis to determine feasibility.

Mission Bay workers will be encouraged to use transit to and from work, and long-term commuter parking will be limited to those whose travel demands cannot be reasonably accommodated by transit. The workers' transit share should be similar to that of the existing downtown. Commute alternatives programs will be widely used to promote carpooling and vanpooling. Necessary travel demand is to be accommodated without adversely impacting existing transportation systems. This will help reduce commuter parking demand and traffic congestion.

In order to allow transit service to be more competitive with automobile traffic, transit preferential treatments such as transit lanes and signal preemption for transit will be implemented where appropriate. To achieve the same modal split ratio that applies in the downtown, transit service to, from, through and within Mission Bay will have to be greatly expanded. Potrero Hill and Showplace Square transit connections with downtown and other parts of the City will be improved by transit routes which extend through Mission Bay.

Muni Metro Services

The extension of Muni Metro light rail vehicle (LRV) service from Market Street to Mission Bay is part of the City's long-range plan to provide rail transit service throughout the Bayshore (or Third

Street) corridor. The Metro alignment within Mission Bay along King and Owens Streets serves the highest trip generators within the development, where the major commercial and highest density residential areas are located. Two Metro stops are planned at Third and Fifth Streets to serve these dense residential and commercial areas. The Metro will cross the Channel near Owens Street and provide a major station at an interim Seventh and Channel Caltrain station,if a downtown Caltrain extension has not first been achieved. The estimated peak hour volume of riders transferring between Caltrain and Metro systems in such a situation is very high, requiring a high capacity station facility.

The Metro alignment will continue south crossing Sixteenth Street to a fourth Mission Bay stop. The Sixteenth Street stop will serve residents and workers in the southerly portion of the site and nearby Potrero Hill areas. The Metro extension will have a small dispatching yard adjacent to the Caltrain tracks near Mariposa Street. Further extension south from this area is possible via either the Southern Pacific Transportation Company (SP) mainline right-of-way or a Third Street alignment. A fifth Metro stop will be provided solely to serve events scheduled at Seventh and Townsend Streets should the ballpark be built.

The Metro will connect with the Muni surface transit routes planned for the Mission Bay area at several of its stations. A major intermodal transit terminal and transfer station will be developed at the interim Caltrain station. In addition to the Metro, Muni routes 30, 47 and 81X will all serve passengers at this location. Each Metro stop will be designed as a transfer center with the exact features and amenities to be determined on a site by site basis. At a minimum, they will include sheltered waiting areas, information services and change machines, and will be near retail uses. The Metro level of service and capacity through Mission Bay is planned at about half the service level of the Market Street subway during peak periods. This capacity and level of service is expected to meet the needs of Mission Bay residents and workers and Caltrain commuters.

Muni Trolley Coach and Bus Transit

Several transit routes will augment Metro service and link Mission Bay to other areas of the City. This transit plan includes two previously north-south downtown radial lines, two east-west crosstown routes and an express route. Three of the four regular lines and all those serving residential streets will be trolley coach routes. The fourth, which is currently motor coach service, may be converted to trolley coach service at some future date. These routes interconnect with one another in several places in Mission Bay, as shown on Figure 7, providing convenient transfer points. The 15 Third line will provide the primary north-south transit service through the eastern portion of Mission Bay along Third Street. The 15 Third is presently a major downtown motor coach route. Its current service pattern will be maintained essentially unchanged, although articulated buses will be used. The high frequency service--every four minutes during the peak period--and expanded capacity will assure excellent transit service to both Mission Bay and to areas south of the project served by the 15 Third. The 15, 22 and 47 lines will meet at a transit transfer center at Third and Sixteenth Streets.

The 22 Fillmore line crosstown service will be re-routed from its current meandering alignment along the northern flank of Potrero Hill to a direct east-west service along Sixteenth Street with a new terminus at Third Street. (The existing Potrero Hill service will be replaced as described below.) This trolley coach service will be converted to articulated trolley coaches and operate at existing frequent headways across the southern portion of the site. The 22 Fillmore will provide convenient service to the Mission District including the BART Station at Mission and Sixteenth Streets.

The 30 Stockton line will be extended south from its current terminus at Fourth and Townsend Streets to serve Mission Bay residential areas just south of the Channel, the Caltrain Station at Seventh and Channel, and the eastern portion of Potrero Hill. Additional peak period service will operate between the Caltrain Station at Seventh and Channel and downtown during such time as that station is the Caltrain terminus. All day service will operate to Potrero Hill on the existing overhead lines on Connecticut and Eighteenth Streets and Third to Twentieth Street. The 30 Stockton extension will provide the first direct no-transfer service to downtown for residents of the eastern portion of Potrero Hill. Service will be provided at the existing high frequency headways, with articulated trolley coaches replacing the standard-sized buses now used on the 30 Stockton.

The 47 Van Ness line will be re-routed from its current service area on Potrero Avenue to Mission Bay via the Division Street corridor. This service will provide a direct connection between Mission Bay (and the Caltrain Station), Showplace Square, the Van Ness Avenue corridor and Civic Center. Potrero Avenue will continue to be served by the 9 San Bruno and 33 Ashbury routes. The 47 will provide east-west service across the Mission Bay residential and retail area. The present concept includes service on Long Bridge Street to Third and Sixteenth Streets. Muni will also explore its continuation across Long Bridge to terminate at Mission Bay Street. Service will be provided at eight minute peak hour headways using articulated trolley coaches.

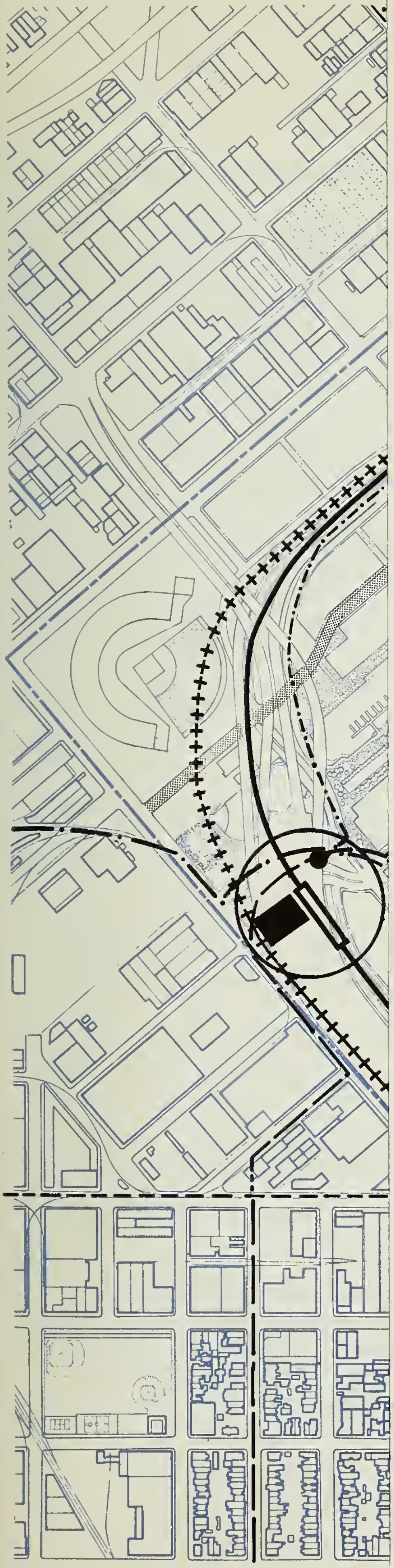
The 81X Battery-Sansome Express line will operate at peak hours between the Caltrain Station and the Battery/Sansome corridor. The service will be upgraded to ensure that Peninsula commuters are provided with connections to the Financial District to replace the services now provided by the 15, 42 and existing 81X lines at the 4th and Townsend Caltrain Station. Service will be provided by articulated motor coach equipment and will operate on schedules coordinated to meet every Caltrain arrival or departure.

Caltrain Peninsula Commuter Service

City policy is to extend the Caltrain to downtown. The plan includes the reservation of a right-of-way through the project site for this extension. The plan proposes to relocate the present station at Fourth and Townsend Streets to an interim location at 7th and Channel Streets if a downtown extension cannot be achieved first. Once the Caltrain is extended to downtown, a new station to serve Mission Bay may be provided either as a subway station under King Street or as a surface station south of Sixteenth Street.

The plan places the interim Caltrain Station under the I-280 freeway structures with the station house just south of the China Basin Channel. The Station will provide space for six tracks. The station design will accommodate all proposed increases in Caltrain service including the increase in length of trains from the current five-car to ten-car trains. The exact level of service provided by Caltrain will depend on the demand for service and on the policies of the operator of the railroad. These decisions will be made independent of the Mission Bay planning process and will involve local, regional, state and federal transportation agencies as well as other public and private interests.

The station will provide for a parallel platform connection to a high capacity Muni Metro station. The Metro station will be immediately east of the Caltrain terminal and will be designed to minimize the length of walk required between the two rail services. Three other Muni surface transit routes will converge here as well. Loading areas for passengers transferring to these transit routes will also be provided at the station house between Owens and Seventh Streets. Adjacent retail stores will make this major transit center an important activity area in Mission Bay.



Transportation

Mission Bay

Transit Routes:

··········	15 Third Line
— — —	30 Stockton Line
- - - - - -	22 Fillmore Line
—·—·—	47 Van Ness Line
-·-·-·-·-	81 X Battery Sansome Express Line
——	Metro Line
▭	Metro Station
●	Bus Transfer Point
┼┼┼┼┼┼┼┼	Caltrain Surface Route
+++++++++	Caltrain Underground Right-of-Way
■	Caltrain Station
○	Intermodal Transit Center
▒	Bicycle Route

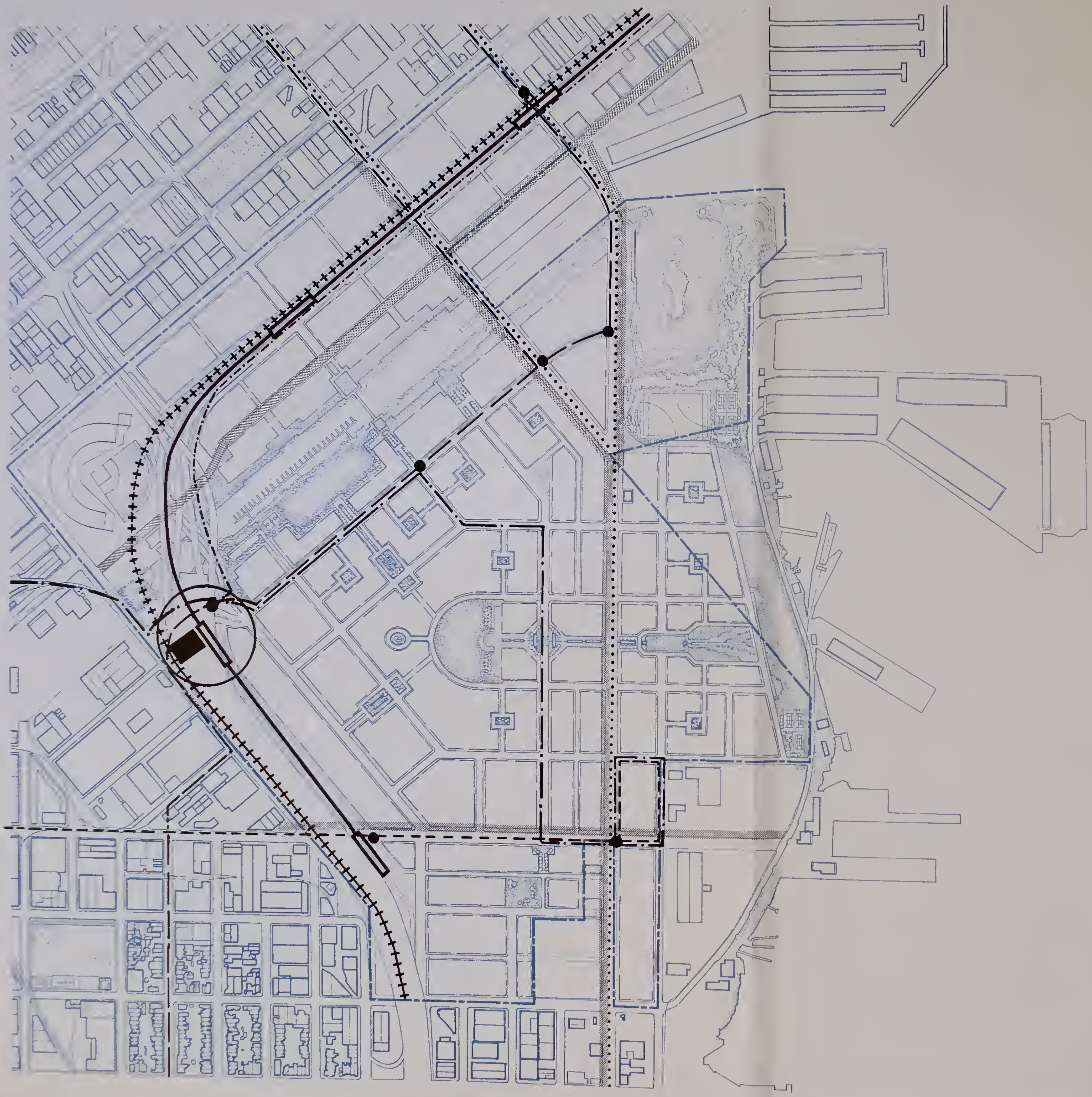
Note: Berry and Sixteenth Streets are assumed to connect to citywide bikeway system in future. Seventh or Owens Streets could be used as interim connectors.

Figure 7

0
200'
1000'
NORTH

Transportation

Mission Bay



Transit Routes:

- ⋯⋯ 15 Third Line
- — — — 30 Stockton Line
- - - - - 22 Fillmore Line
- —·—·— 47 Van Ness Line
- —··—··— 81 X Battery Sansome Express Line
- —— Metro Line
- ▭ Metro Station
- ● Bus Transfer Point
- ┼┼┼┼┼ Caltrain Surface Route
- ++++++ Caltrain Underground Right-of-Way
- ■ Caltrain Station
- ○ Intermodal Transit Center
- ▨ Bicycle Route

Note: Berry and Sixteenth Streets are assumed to connect to citywide bikeway system in future. Seventh or Owens Streets could be used as interim connectors.

Figure 7

Several issues regarding a station at Seventh and Channel remain to be resolved before the proposal can be implemented. Caltrans, the current operator of the service, will support the relocation at this location only if there will be no adverse impact on patronage. Preliminary studies indicate that even with the other transit service called for in this plan, there would be an initial decline in Caltrain patronage. While the study indicates that this would ultimately be regained and even increase as Mission Bay and other nearby commercial areas develop, this interim loss in patronage is undesirable. Further analysis will be undertaken to recommend additional Muni service and other measures to avoid this decline. The design of the station is complicated by its location under the I-280 freeway structure. The close spacing between existing freeway piers will dictate the location of tracks and platforms. In addition, a location for a Caltrain storage yard must be identified. These issues will be resolved when more detailed engineering studies are complete.

Freeway Access

Mission Bay will be served by three sets of ramps from Interstate Freeway 280 (I-280): the existing Mariposa ramps and Sixth Street ramps, and new ramps at King Street. The plan for the reconstruction of the northerly terminus of the I-280 freeway includes the following features:

1. The existing freeway structures will be removed from Third Street back to the vicinity of Sixth Street. The portion of the freeway structure from China Basin Channel to the southerly limits of the project will remain as currently constructed.

2. The existing Fourth Street off-ramp (there is no on-ramp) will be relocated as part of the new interchange with King Street between Fifth and Sixth Streets.

3. The new King Street interchange will have both on- and off-ramps to serve traffic destined for The Embarcadero. This interchange will also serve traffic destined to Mission Bay north of the Channel.

4. The existing Sixth Street ramps will be maintained at their current connection to the city street system at Brannan Street. These ramps primarily serve the South of Market area but will also provide a route for traffic destined to the northwesterly portions of Mission Bay including the ballpark site.

Mission Bay south of the Channel will be served by the I-280 interchange at Mariposa Street. A local street will lead traffic from the Sixteenth and Owens Street areas to the Mariposa Street ramps and onto I-280.

Street System

Mission Bay's street system will serve its internal circulation needs while connecting with existing adjacent City streets to ensure proper links with the rest of the City. Although a number of Mission Bay streets will be the connectors to major transportation corridors, they will be sized so that they are unattractive to excessive traffic. Overly wide streets are not only unsightly, they are a nonproductive land use.

The Mission Bay Street system will consist of a hierarchy of streets including primary and secondary thoroughfares, neighborhood collector streets, and mid-block lanes. The thoroughfares will serve Mission Bay and provide routes for traffic through the project site. Secondary thoroughfares will be designed to supplement the major thoroughfare system and serve the commercial and industrial portions of the project. The remaining streets within the project will provide access to the residential and retail areas and will not serve through traffic. Street configurations, with lane and sidewalk widths and landscaping are provided in Section 7.12. Selected existing San Francisco street and sidewalk widths are in Appendix 2.

Truck traffic is necessary to businesses, but undesirable in residential areas. Truck drivers will be able to use all primary and secondary thoroughfares as fast and direct routes to their destination without disturbing other areas. Non-local travel will be discouraged in the central neighborhood and will be channelled to the secondary and primary thoroughfares. Trucks will be prohibited on other streets except for one block in and out to make deliveries. The existing freeway interchange at Mariposa Street and new interchange in the vicinity of Sixth/King Streets will be coordinated with the proposed streets in Mission Bay as well as the other existing streets in the vicinity.

Streets in the Circulation Element are differentiated by the scale of the rights-of-way and the associated volumes and types of traffic they will accommodate. Primary and secondary thoroughfares and neighborhood streets are described below.

King Street in Mission Bay will be a major landscaped boulevard extending from The Embarcadero along the northern waterfront as

The Embarcadero is reconstructed. The boulevard will provide an exclusive median right-of-way for the extension of Metro service, wide sidewalks and four traffic lanes. King Street is intended to continue this street design to the point where it meets the new ramps from I-280. Preliminary studies indicate that separate left turn lanes will be needed at Fifth and Fourth Streets and a double left turn lane will be required for both east and westbound traffic at King and Third Streets. There will generally be two lanes of through traffic in each direction. Parking will be permitted where it can be accommodated while maintaining generous sidewalk widths.

Third Street provides the major north-south travel corridor through the east side of the site. Third has traditionally connected the southeastern portion of the city with downtown and will continue to do so. A major function of Third Street will be to provide the north-south route for trucks serving the Central Waterfront north of the new I-280 Evans Avenue ramps. It will be designed to provide for a commuter bicycle route in both directions south of the Channel and will have parking on both sides.

Fourth Street combines with Third Street to form a one-way couplet between King and Mission Streets. The operation of Fourth Street south of King Street will be determined after further study. The street may operate one-way southbound from King Street to its intersection with Third Street or it may be two-way to complement the two-way operation of Third Street south of King Street. Fourth Street will provide space for the southbound portions of the commuter bicycle route from downtown to the Third Street corridor.

Sixteenth Street will become the most important street across the southern portion of the project, carrying traffic from the edge of the Bay to the Mission District and beyond to Twin Peaks. The street will operate with two lanes of traffic and bicycle routes in each direction and parking on both sides.

Secondary thoroughfares with fairly heavy local traffic loads within the site include King Street west of the new freeway ramps, Berry Street between Owens and Seventh Streets, and Owens Street. Two streets on the perimeter of the site (Townsend and Seventh Streets) will also function as secondary thoroughfares. Streets on the perimeter of the project will provide two lanes of traffic in each direction. Parking lanes and sidewalks will be provided on each street depending on its local function and available right-of-way. Each internal street is described below.

King Street West of I-280 Ramps will have only a local traffic function. It will have one travel lane and one parking lane in each direction and will work with Berry Street to provide a continuous east-west local street across the north side of the project. The exact dimensions of King Street in the area will depend on the final design for the ballpark and its related facilities. If the ballpark is not developed, King Street will extend directly to Seventh Street.

Berry Street Between Owens and Seventh Streets will combine with King Street to provide a continuous local arterial across the northern portion of the site and around the ballpark. It will have a peak period capacity of two lanes in each direction. The scheduling of events at the ballpark would affect the operation of this block of Berry Street. The portion of Berry Street east of Owens Street will be protected from through traffic by appropriate traffic controls to assure it functions only as a low traffic volume residential street.

Owens Street will provide the main access routes along the west side of Mission Bay south of the Channel. It takes on an important local traffic distribution function because the railroad blocks all connections to Seventh Street between Berry and Sixteenth Streets. Owens will operate with two lanes in each direction and parking on both sides.

A network of internal neighborhood streets will serve Mission Bay residences and shops. With one lane of traffic in each direction, on-street parallel parking and sidewalks, these narrower rights-of-way will be used primarily by residents to reach their homes. Similarly, shoppers will use Long Bridge Street to reach shopping destinations. Transit routes through the neighborhood use these streets, as shown in the Transportation Plan (Figure 7). Around Crescent Park and Fountain Park still narrower streets with no parking allowed next to these open spaces are planned. Lastly, one-way lanes internal to many of the residential blocks complete the circulation system. These lanes will have parking on one side and sidewalks for pedestrian use.

Parking and Loading

Insufficient parking and loading facilities create parking congestion, while excessive parking supply distracts people from using transit and results in excessive traffic congestion. For those residents who own vehicles, adequate off-street parking should be provided for storing vehicles to avoid parking congestion in the neighborhood.

Commuter parking for Mission Bay workers should not be in excess of their needs, consistent with the desire to encourage high transit use. No additional spaces for downtown commuters will be permitted, as such parking creates localized traffic impacts in the morning and afternoon peak period.

Healthy growth of business depends on adequate delivery and service vehicle loading and parking facilities to receive supplies and services. It is essential that these spaces be provided off the street and with convenient access to freight elevators and building receiving areas.

The number of parking places planned for Mission Bay is consistent with the plan's overall "transit first" policy. This means that the parking ratios are based on a transit use goal appropriate for development in the central area of the City. Higher transit use means less space need be set aside to park private vehicles and fewer cars on the streets, highways and bridges.

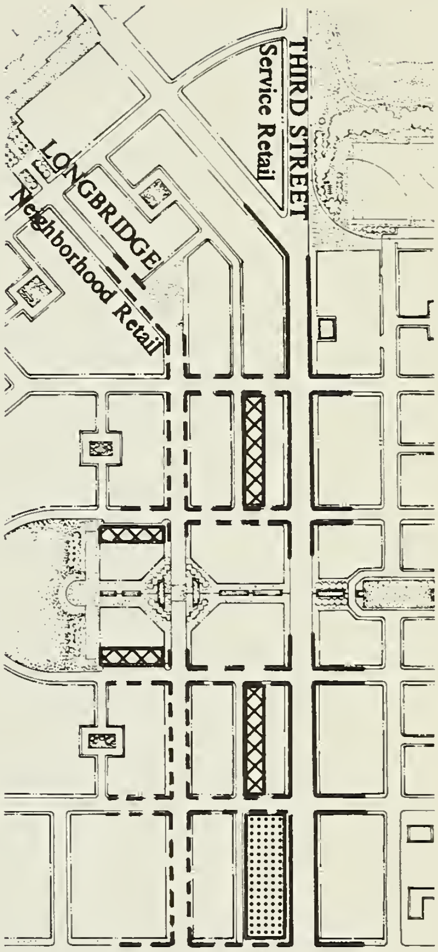
Parking for offices is provided at an average ratio of one space per each 1,000 square feet (1:1000). This rate is consistent with a transit use where 60% of office workers use public transit to get to work. This goal for Mission Bay transit use for office workers is lower than the existing downtown and higher than the existing South of Market area transit use. The same parking ratio applies to service/light industrial/research and development uses. A lower parking ratio of 1:1400 for all these uses will also be considered, which would be dependent on higher transit use.

Residential parking will be developed at a rate consistent with overall vehicle ownership patterns in San Francisco. In 1980 this was 0.91 vehicles for each dwelling unit in the City. The residential parking standard will be one off-street space for each dwelling unit with exceptions to be allowed where justifiable for low income and elderly housing units, and for other cases where appropriate.

Parking for the retail area of Mission Bay will be provided at a rate of one space for each 500 square feet of development. This will include both on-street and off-street parking, at roughly equivalent proportions.

The hotel parking will be provided at a ratio of 0.4 spaces per room. Parking for community facilities will be determined on a case-by-case basis.

The total parking demand anticipated for Mission Bay will be for about 31,400 spaces. The streets will provide 17,000 spaces and the



Neighborhood Retail: 200,000 s.f.
Neighborhood Retail Parking

— — — 360 Cars*

▨ 180 Cars

Service Retail: 200,000 s.f. max.
Service Retail Parking

——— 220 Cars*

░ 100 Cars

Total Retail: 400,000 s.f. max.
Total Parking: 840 Cars

* parallel parking assumed

remainder (14,400) will be provided as off-street parking. This is exclusive of the proposed ballpark, which could share parking with commercial and industrial uses in the area. (An average attendance weekday night game would have a demand for about 6,000 spaces, and a capacity event about 9,800 spaces). Existing long term parking used by downtown commuters will be phased out as development occurs on parcels currently used in this manner.

Table 11: Parking Spaces, Mission Bay

Off Street:	
Housing (1/unit)	7,300
Office (1:1000 SF)	4,000
Service/Light Industrial/R & D (1:1000 SF)	2,300
Retail (1:500 SF, including on-street parking)	600
Hotel (.04 per room)	160
On Street Parking:	17,000
Total Parking Spaces	31,360

Note: Parking for office and S/LI/RD assumes 1:1000 parking although a reduced ratio of 1:1400 is also being considered.

Off-street freight loading spaces will be provided at levels comparable to Planning Code requirements for the C-3 (Downtown office) district. These standards are as follows:

1. Offices and banks will require one off-street freight loading space per 100,000 sq. ft. of gross floor area.

2. Retail stores, restaurants, bars and drug stores will require one space for every 25,000 sq. ft. of gross floor area for any combination of such uses within a single building. Retail uses will have off-street loading through the parking garages behind them.

3. Wholesaling, manufacturing, and all other uses primarily engaged in handling goods will require one space where the gross floor areas is between 10,000 and 50,000, and 0.21 spaces per 10,000 square feet of gross floor area where over 50,000 square feet.

4. Hotels, apartments and all other uses require one space where the gross floor area is between 100,000 and 200,000

square feet, two spaces for area between 200,000 and 500,000 square feet, and three spaces if over 500,000 square feet, plus 1 space for each additional 400,000 square feet.

Pedestrian Circulation System

Mission Bay will have an extensive pedestrian network. It will be within open spaces as well as along streets, mid-block lanes, and passageways through long blocks. The network will minimize conflicts between pedestrian and vehicular traffic. It will not only provide good connections for uses within the project area, it will provide proper connections with surrounding neighborhoods.

Where vehicular traffic volume is low and circulation not essential the street space should serve also as pedestrian circulation and open space. This can include the application of a “Woonerf” concept in residential areas, where automobiles can be required to share space which is visually and functionally designed for pedestrians.

Sidewalks will have sufficient width for pedestrian circulation, amenity and jogging. Typical sidewalk widths of 12 feet will allow people to pass one another in pairs without difficulty, while leaving space for street trees, newspaper stands, building steps and other encroachments which reduce effective sidewalk widths. Access to the sidewalks and transit stops will be designed to ensure easy access for the physically impaired and elderly persons. The desirable climate in this area and numerous links between the open space and street systems on this site make streetscapes an integral part of the open space system.

Bicycle Circulation System

Bicycles are widely used for recreational and other trips, and as a means of commuting. The City has an extensive bikeway plan and Mission Bay will provide connections to and continuity with this existing bikeway system. Bicycle commuters will find space added to street pavement in each of the major streets across Mission Bay. (See Figure 7). Secure and convenient storage facilities at points of origin and destination will be encouraged.

Commuter routes will include Sixteenth Street at the south and Berry Street at the north. A major north-south route along Third Street will connect with routes on The Embarcadero and on the Third/Fourth couplet across the South of Market area. Recreational bicycle paths will be provided in the open space areas of the project, along China Basin Street and along China Basin Channel, connecting with the wetlands park area.

Emergency Access Routes

Mission Bay street development will allow for an efficient response by City emergency services to expected routine fire, police and medical calls. The street system is also planned to remain generally passable following a major earthquake. The most probable points of roadway closure would be at the bridges or their approaches to China Basin Channel, or the elevated I-280 freeway structure. The plan for emergency access routes is primarily aimed at dealing with these two hazards which could result in local street closures.

The Third Street Bridge would likely be passable following a major earthquake assuming a probable soil settlement on the bridge approaches can be quickly filled by an emergency services operation. Earth berms between Third Street and the wetlands park could be used for this purpose. The Fourth Street Bridge has a high probability of being damaged and is expected to be unusable for an extended period following an earthquake. The new low level bridge proposed at Owens Street can be built to withstand earthquake forces and should remain passable following an earthquake. With both the Third Street and Owens Street bridges open, north-south routes across China Basin Channel and the project site will be available following an earthquake.

A collapse of a portion of the I-280 freeway structure could cause the closure of Sixteenth Street, the main east-west route in the southern portion of the site. The plan includes a second street just north of the Caltrain Station crossing under the freeway, normally for transit use only. This would become an alternative east-west emergency access route if needed. Berry Street will also pass under the freeway just north of Channel Street, as would Townsend Street. The use of Third Street to the south poses no special seismic hazards and should be available as the major earthquake evacuation route from the site.

Rail Freight Service

The Belt Railroad currently provides rail freight service from the south to the finger piers of the northern and central waterfronts. This rail service will be relocated but will be fully maintained. It currently connects to the Southern Pacific mainline along King Street. To avoid new intensive office and residential uses planned along King Street, the Belt will be re-routed to use existing but currently abandoned trackage on the Third Street Bridge. It will leave The Embarcadero on Berry Street, cross the Third Street Bridge, and join with existing Belt trackage on Third and China

Basin Streets. The northern and central waterfront portion of the Belt will be joined in a new direct linkage through Mission Bay. The rerouted Belt will join trackage in Illinois Street in order to make its connection to the southern waterfront and SP mainline. The existing Sixteenth Street lead track will be eliminated when the southern portion of the project is constructed. A new connection to the mainline south of Mission Bay will be needed when this occurs. The options for this new connection to the mainline include use of a new rail bridge over Islais Creek which may be provided as Piers 70 and 80 are developed, or the reconstruction of an existing lead near Army Street.

Other rail freight service will be maintained to all existing users west of the project site via lead trackage from Sixteenth Street to the Division Street corridor. This service will join the mainline along Seventh Street south of the relocated Caltrain Station.

Channel Navigation

China Basin Channel is a navigable waterway under the jurisdiction of the United States Coast Guard. Regulations require any new bridge across this navigable waterway to provide sixty-five feet of vertical clearance from mean high water to the bottom of the structure, over a channel seventy-five feet in width. This can be achieved with a high-level fixed bridge (such as the I-280 freeway over the Channel) or with a drawbridge such as the Third or Fourth Street bridges. The lengthy approaches required for a 65-foot bridge make any new fixed bridge impractical. New opening-span bridges are much more expensive to construct and operate than low-level fixed bridges. The portion of the waterway beneath and west of the I-280 freeway structure is not truly navigable, however, and perhaps could be removed from navigable status through an administrative procedure. If so, a new low-level vehicular bridge across the Channel at Owens Street under the existing freeway structure will be provided.

A movable pedestrian bridge is proposed at Fifth Street. The precise design of this structure is not determined, but it will have to open on demand for waterway traffic and close on demand for pedestrian use. The bridge will be opened and closed manually (or remotely, if a power system is available) by either the crew of each vessel needing passage or an attendant. The specific operation requires careful attention in future phases of work. It could be a swinging bridge or a sliding (or "pocket-door") bridge, as well as a draw bridge.

Citywide Transportation System Benefits

The Mission Bay area is a break in the City's infrastructure. The majority of its public rights-of-way have never been developed; those that do exist are largely blocked by railroad tracks on three sides, hampering connections with neighboring development and San Francisco Bay. The Caltrain and the I-280 Freeway stop short of their originally intended destinations of downtown and at the Bay Bridge, respectively. The development of Mission Bay will benefit the City's total transportation system by improving local and regional transportation connections.

Several Muni routes will be extended into and through the project as part of the Mission Bay Plan. The extension of the Metro, for example, from Fourth and King Streets south to Mariposa Street will be assisted by the project. This extension will bring Metro service three-quarters of a mile further into the Bayshore Corridor, a longstanding goal of the City. The 30 Stockton trolley coach route will be extended from its current terminus at 4th and Townsend Streets across the project and onto the northeast flank of Potrero Hill, offering the residents of Potrero Hill their first no-transfer service downtown. Such a direct Muni route has been a long-standing objective which the project will enable the City to fulfill. Other proposed transit routes into Mission Bay will result in a more logical route structure for the Muni system in the South of Market and central waterfront areas.

Mission Bay development will help to foster the City's policy of ultimately extending Caltrain Peninsula Commute Service downtown. Retention of such a right-of-way downtown has been considered a precondition of Mission Bay planning. If this is not achieved before the blocks presently occupied by the Caltrain Terminal are ready for development an interim station will be built at Seventh and Channel Streets, adjacent to Showplace Square. The Metro and the 30, 47 and 81X transit lines will integrate Caltrain service with the City's system, serving a variety of locations in San Francisco.

King Street will be rebuilt as a continuation of a landscaped Embarcadero boulevard now being planned by the City between Rincon Point and South Beach. The development will rebuild and upgrade several other streets including Third, Sixth and Sixteenth Streets. Public funds otherwise required for routine maintenance of these aging streets can be diverted for street maintenance in areas away from Mission Bay. The project will also provide a network of new streets which will complete the city street system in the project area.

The new I-280 ramp system will be constructed to touch down on King Street between Fifth and Sixth Streets, providing an additional on-ramp for this regional connector.

5.3.4 Utilities Element

Goals in utility system element design are: (1) economical placement of new facilities to accommodate projected land uses and respond to phased development over a lengthy build out period; (2) retention of significant existing utility systems wherever possible; and (3) minimum disruption to existing users of these services.

Figure 8 delineates major corridors in a general system which can effectively meet the infrastructure needs of Mission Bay. The precise placement of new utility lines and further system connections will depend on final development plans and the requirements of utility providers.

Water The development will require both low pressure (domestic purposes) and high pressure (fire protection) systems. Significant off-site upgrading of the existing low pressure transmission system does not appear necessary. The majority of the existing on-site systems will be retained. Unconnected "dead-end" runs will be looped to improve system efficiencies and new lines will be installed in proposed rights-of-way to serve new development. All required water service can be accommodated in either existing or proposed street rights-of-way. Major new high pressure loop systems will be installed as shown in Figure 8 to provide necessary emergency fire protection services. New pumping facilities may be necessary to provide the required pressure and volume.

Combined Sewer. San Francisco is served by a combined storm and sanitary sewer system, which carries and provides treatment for both storm runoff and sewage. Major sewerage facilities are within the boundaries of Mission Bay. The plan minimizes disruption to these facilities. It retains major storage conduits on both sides of the Channel and does not affect the existing Channel Pump Station. There may be a need to relocate a section of the large existing sewerage force main between Sixteenth and Mariposa Streets. Alternatively, buildings planned over that main may be required to provide access to it. New development will have sewer lines in either existing or proposed rights-of-way and connected to existing facilities. Development will increase storm flows into the system (the major component determining peak flow capacity needs), although Mission Bay's 294 acres are but 5% of the 5,528-acre drainage basin which directly results in storm runoff in China Basin Channel. Additional runoff from the northeastern quadrant of the City flows via sewer lines to this area as well. Present roads and buildings on the site already contribute their runoff to the sewerage system.

Gas. The project area contains an extensive existing system of low-pressure, large diameter gas mains with a concentration of facilities in Third, Seventh, Sixteenth and Mariposa Streets. The intended retention of major arterial streets in their present location will serve to minimize gas main relocation costs. However, particular proposed uses such as research and development and mid-rise offices will require extension of the existing high pressure system currently off-site in the Potrero district.

Electric Power. A combination of overhead and underground electric transmission and distribution systems serve the project area. Substantial underground lines exist in Third, Seventh, Sixteenth and Pennsylvania Streets. Current overhead lines will be placed underground in phases as development occurs. The retention of major streets in their present location will minimize relocation costs. In particular, PG and E wishes to retain its existing 115 KV feed in its current location in Third, Sixteenth and Seventh Streets. The trolley coach transit system for Mission Bay will require its own electric overhead wiring network.

Traffic Signalization. The plan envisions a phased extension of the traffic signal system at selected intersections throughout the project area. Multi-phase, specialized systems will in all likelihood need to be installed along the King, Third, Fourth and Sixteenth Streets. Standard two-phase signals will be needed on several other streets including Townsend, Berry, Long Bridge, Owens, and Seventh Streets. Since intersection signalization and associated signing is a significant visual element in the streetscape, a concerted effort will be made to integrate these elements into the design of the project. Precise location for signals will be determined later.

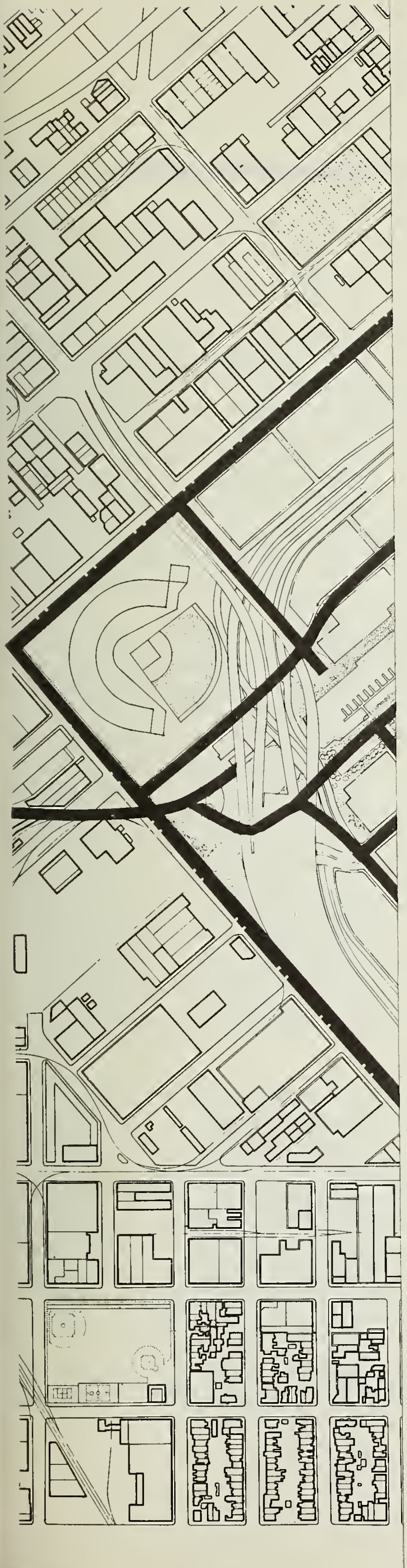
Telecommunications and Joint Trench Facilities. This category of infrastructure improvements includes telephone, cable television, police and fire alarm, computer links (including fiber optic cables) microwave, and satellite communication facilities. The need for these facilities is dependent to a large degree on site and building specific needs and cannot be accurately determined at this time. However, the scale of the plan and the extensive redevelopment of at least the interior parts of the project should encourage efforts at utilizing state-of-the-art communications technology. The visible elements of these systems will be integrated into the project design.

Utilities Corridors Element

Mission Bay

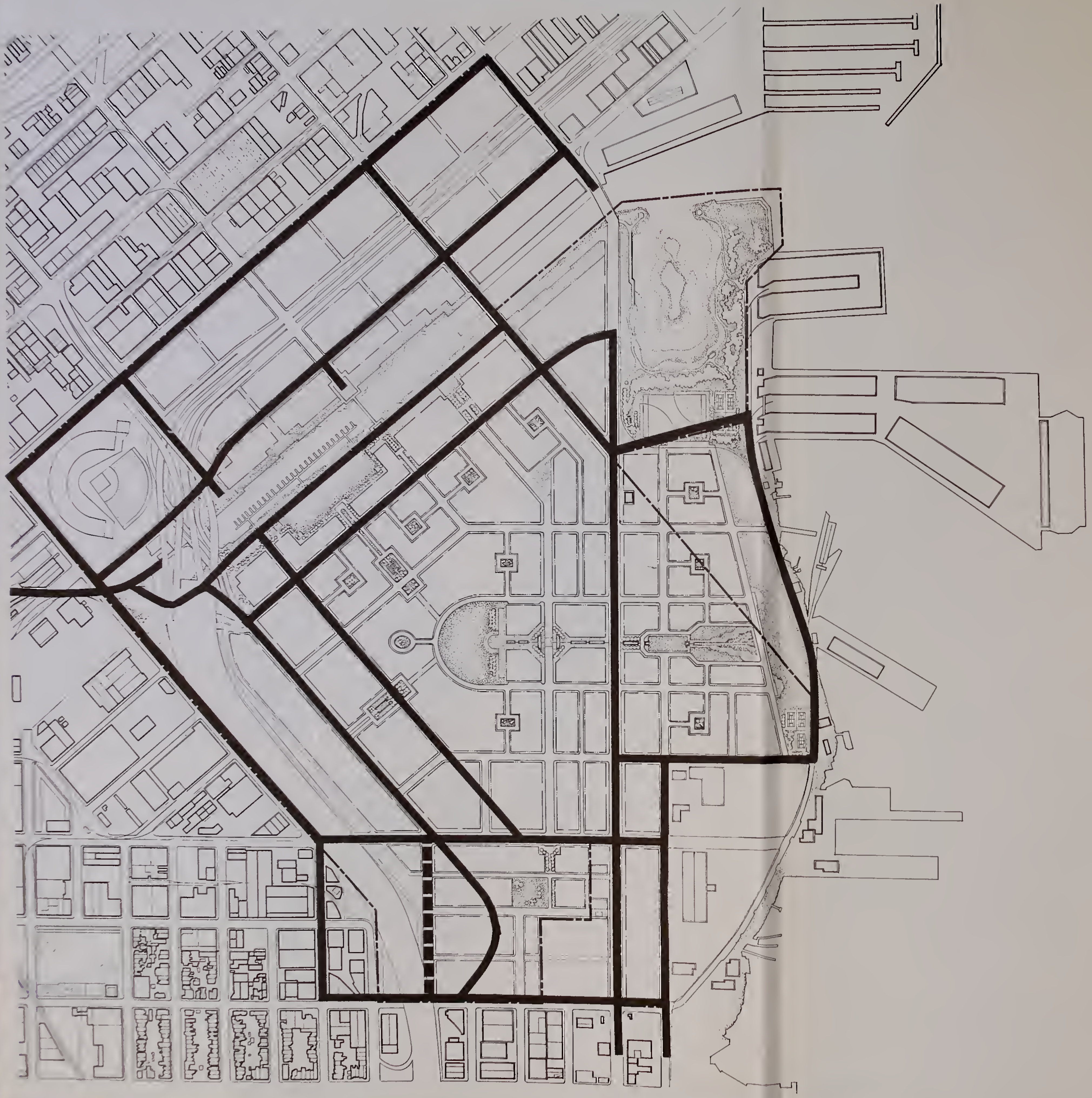
▬ Major Utilities Corridor

■■■■■ Alternative Route



0
200'
1000'
NORTH

Figure 8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200'
1000'
NORTH

Utilities Corridors Element

Mission Bay

▬ Major Utilities Corridor

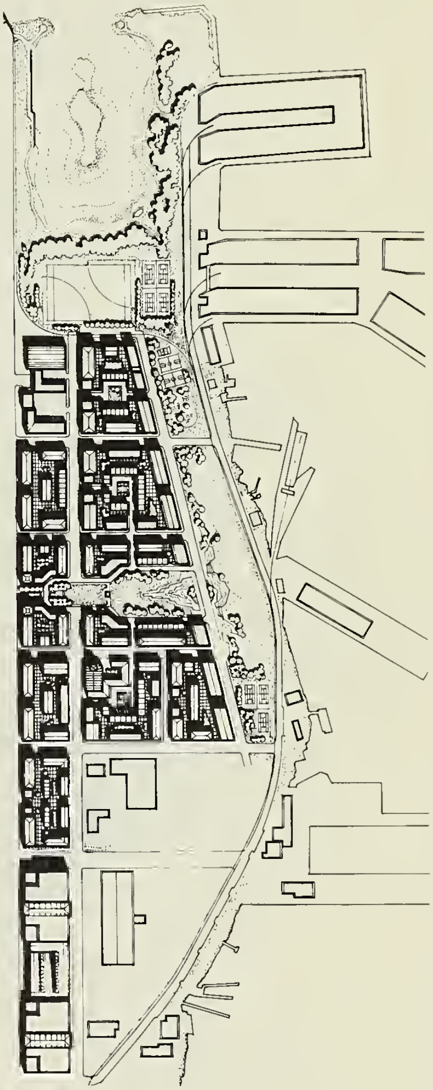
■■■■■ Alternative Route

Figure 8

5.4 PLAN VARIATIONS

Container Terminal East of Third

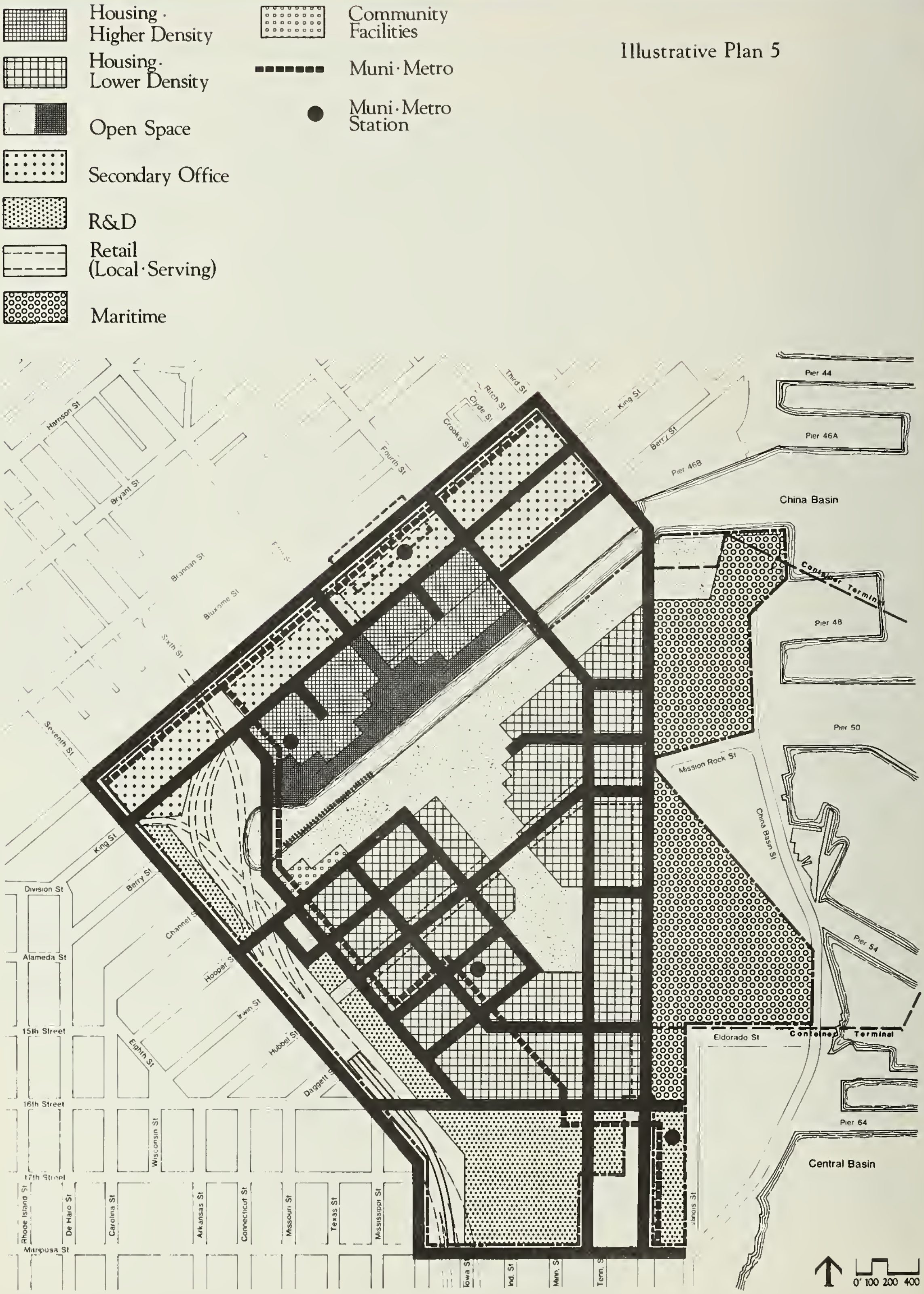
If a container terminal were built along the eastern shoreline of Mission Bay as set forth in the MTC and BCDC Seaport Plan and the Port Master Plan, as described earlier in Section 3, substantial changes in this plan would be required. A multi-berth container terminal facility could require all of the acreage east of Third Street to support its operations. It would be built where this plan shows the 13.5-acre wetlands, 5 acres of programmed recreation facilities, the fire, police and public services complex planned at Third and Fourth Streets, 1,000 dwelling units on 13 blocks, and 9.7 acres of other public open space. It would result in a plan like that shown on the next page.



The container terminal would shift the balance in the plan from housing and open space toward employment generation, especially because office and light industrial uses are not planned in site area east of Third and thus would not be affected proportionately. The land use program therefore would require rebalancing, with housing replacing commercial uses in some presently non-residential portions of the site. The plan would require larger parks and playfields along the Channel and within the central neighborhood area which also would change areas now planned for housing. The ability to have a wetlands habitat would have to be reevaluated. Overall, less housing, open space, and office and S/LI/RD space would be provided, proportionately reduced as the total site is reduced. Conversely, the plan would provide modern container terminal or maritime development east of Third Street. This would provide jobs and diverse economic activity. In the interim, the present maritime and industrial uses could continue east of Third Street.

Maritime development of the waterfront would cause Mission Bay to be reoriented away from the Bay. Specifically, proposed open space and view corridors in streets and parks extending to the Bay would be foreshortened at Third Street and would be better refocused on some other amenity. Open space would not be extended to Third Street where heavier truck and rail traffic could be expected. Public access to the shoreline would be limited to either end of the container terminal facility. This shoreline would not be a desirable destination for local or citywide visitors seeking the natural environment that a park at the Bay's edge would offer.

In addition, development along Third Street, especially if it were housing, would have to be buffered to minimize what may be


Housing - Higher Density
Housing - Lower Density
Open Space
Secondary Office
R&D
Retail (Local-Serving)
Maritime
Community Facilities
Muni-Metro
Muni-Metro Station
Harrison St
Bryant St
Brannan St
Townsend St
Bluxome St
Sixth St
Seventh St
King St
Berry St
Third St
Ritch St
Clyde St
Crooks St
Fourth St
Pier 44
Pier 46A
Pier 46B
China Basin
Container Terminal
Pier 48
Pier 50
Mission Rock St
China Basin St
Pier 54
Eldorado St
Pier 64
Central Basin
Division St
Alameda St
15th Street
16th Street
17th Street
Mariposa St
Channel St
Hooper St
Irwin St
Hubbell St
Eighth St
Daggett St
Wisconsin St
Rhode Island St
De Haro St
Carolina St
Arkansas St
Connecticut St
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Mississippi St
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Ind. St
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Tenn. St
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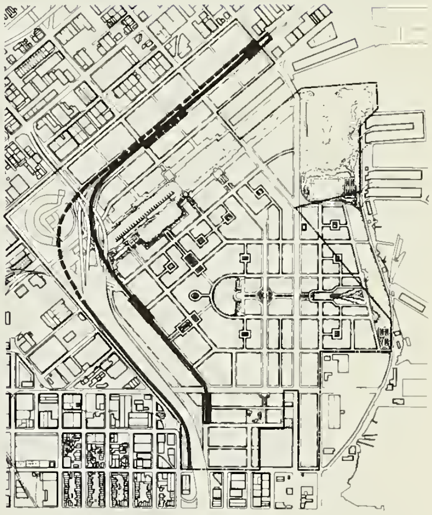
Illustrative Plan 5

perceived as negative visual or noise aspects associated with the container terminal cranes, trucks, rail and other equipment. While some people would surely enjoy views of the port activities, most residential units would likely be oriented westward to ensure their marketability. A setback on both sides of Third Street would be advisable to mitigate these effects.

In summary, a smaller inward-turning neighborhood would have to be planned here oriented to China Basin Channel and shared with maritime uses. The opportunity to create a community oriented toward the Bay and to add extensive public access along the Bay shoreline would be lost.

Caltrain Station Under King and Muni Metro Along Owens Street

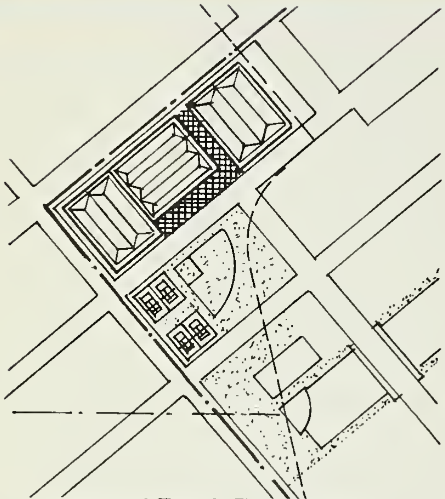
If a Caltrain extension is determined to be not feasible, the Peninsula Commuter Service could continue to its present terminus by constructing a Caltrain station under King Street between Fourth and Fifth Streets. This could be accomplished when King Street is being enlarged or at a later date. Costs might be reduced if it were developed as part of building basements, but the anticipated phasing of office buildings along King Street over two decades or more makes this solution implausible. Intermodal transfer with Muni Metro would continue to be feasible. This undergrounding would keep the Caltrain closer to downtown than the plan's proposed interim station at Seventh and Channel Streets.



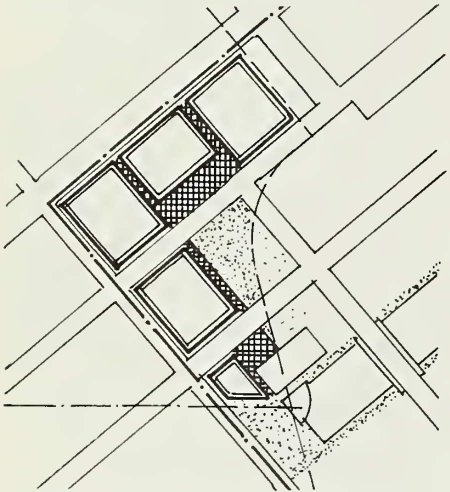
With no Caltrain station at Seventh and Channel Streets, there would be no need for the Muni Metro route to abut the Caltrain right-of-way. The Metro could stop at Owens Street near the Channel itself and then be routed along Owens to a stop at Sixteenth Street. This route alteration would place Metro stops 200 feet closer to residents of Mission Bay south of the Channel, but in routing the Metro on Owens, Metro noise would be nearer to adjacent residents.

Ballpark and Hotel Variation

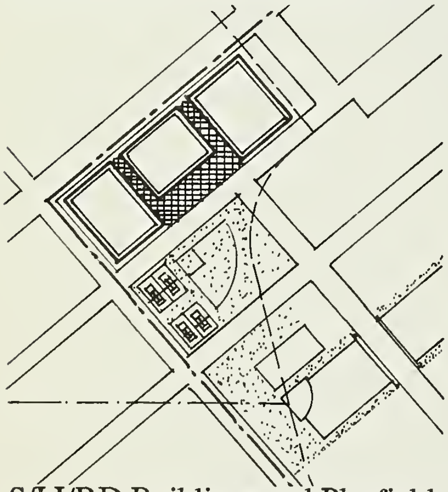
If the Seventh and Townsend Streets area were not reserved for a ballpark, certain adjustments to the plan would be appropriate. King Street would continue straight under I-280 towards Showplace Square. Berry Street would likewise continue within its present right-of-way rather than curving to the south as required to accommodate the ballpark. Owens Street would meet King Street at a "T" intersection, rather than curving into King Street. The I-280 King Street ramps could loop over a portion of the ballpark



Sports and Pool Complex



S/LI/RD and Other Buildings



S/LI/RD Buildings and Playfields

area before dropping to King Street, lessening their presence and impact on King Street between Fifth and Sixth Streets, and improving that street for housing and office use.

Research and development, wholesale/showroom, offices, large-scale retail, recreational playfields and an indoor sports complex, including an Olympic-sized pool, are all possible uses for this site. Other community service facilities would also be possible uses. Housing is not a desirable use here.

Uses could be added here as a net increment to the project or could be relocated from elsewhere in the project area. To the extent that uses are relocated to this location, the land made free by the transfer could be planned for other uses, or could be developed at lower densities. Service/light industrial/R&D uses are planned at high densities, and would be more marketable under present industry standards if they had lower densities. Alternatively, housing could replace a portion of such uses south of Sixteenth Street. Recreational uses at Seventh and Townsend Streets could augment playfields and facilities within Mission Bay, as well as serve the neighboring South of Market area.

The hotel in this plan is associated with the ballpark, and planned for what could alternatively be a housing area with close to 200 residences. That area would be desirable for either use. In contrast to housing, the hotel does add to the variety and vitality along the Channel.

5.5 SOCIAL AND ECONOMIC COMPONENTS

This section addresses the social and economic components of the plan. They will require implementation along with the plan's physical components and, therefore, will be the subject of continued evaluation and extensive negotiation during the process of drafting the development agreement.

Housing Opportunities

Housing is the City's highest priority at Mission Bay. The Mayor's letters of October 1984 and May 1986 sought to achieve at least 7,577 and preferably at least 7,701 housing units. Both market-rate and affordable housing components of the overall housing program provide an opportunity for the City to meet its housing needs. In both areas, attention needs to be given, and implementation programs developed, to help meet the needs of households of all types, tenure and size. This includes:

- housing of a size suitable for families with children
- low- and moderate-income housing with provisions for long-term affordability
- accessible and adaptable housing for the physically disabled and the elderly
- both rental and ownership housing opportunities
- other market-rate housing suitable for households with special needs and of varied lifestyles.

The Mayor's letter of 1984 established a goal that at least 30% of the residential units would be affordable. Santa Fe Pacific was to price 15% of the units (1,177) at affordable prices, and the City was to create an Affordable Housing Fund to provide financial assistance so that at least an additional 15% (1,137) could be marketed at affordable prices. Affordable was defined as prices ranging between $105,000 and $150,000 and averaging $125,000 (1984 dollars). While these goals were set in terms of purchase price, rental units are included within that concept.

This level of affordability translates into 12% moderate income (affordable to households with incomes between 80% and 120% of median income) and 18% middle income (incomes between 120% and 150% of median). The City's goals are for both more units and deeper subsidies.

Funding for the City portion of the affordable housing can be implemented with a combination of mechanisms, depending on the level of subsidy specified. Federal or state assistance, in the form of Section 202 senior housing grants, Housing Opportunity Development Action Grants (HODAG's), and state mortgage revenue bonds would be a first choice for public funding, but are unlikely to be available in sufficient amounts to be a major source of funding.

Local priorities for housing assistance would include use of City mortgage revenue bonds or the use of a portion of the tax increment to be derived from the Mission Bay project. Limits on eligibility and per capita limits on bonding authority will restrict use of mortgage revenue bonds more than in previous years. Land liens, in which the occupant does not make payments or makes reduced payments toward land cost, are another subsidy vehicle that has been used on City-owned land. Other possible funding sources could include the Office Affordable Housing Production Program (OAHPP), which has limited resources, funding made available by the developer in exchange for City bond financing of project infrastructure, or Urban Development Action Grants (UDAG's).

Other options for provision of affordable housing include the use of reduced residential parking requirements (e.g. shared parking; giving households an option to rent or not rent parking as part of the unit cost; or offering less than one space per unit), or the use of limited equity cooperatives. The latter approach is more effective at maintaining affordable housing in the long term than reducing housing cost at the time of construction.

The Mayor's Office of Housing and Economic Development is the appropriate agency to ensure the production of sufficient housing in the implementation program and to coordinate and manage the affordable housing component. Both non-profit and for-profit housing development corporations are expected to be involved in the construction of affordable units.

Family housing and a mix of rental as well as ownership opportunities are important elements of the housing program. Mission Bay as a new neighborhood should have a mix of such housing to serve varying population needs. While housing must meet marketability considerations, efforts can be made to shift that market toward identified City housing needs. Affordability, housing types and tenure will all be the subject of development agreement negotiations.

Accessibility and Adaptability

The level terrain, good weather, and anticipated good transit service will make Mission Bay an attractive location for the elderly and physically disabled. Buildings and places within Mission Bay need to be accessible to the extent possible. This includes access to open space, transportation and community facilities which have been discussed earlier.

The Residence Element notes that disabled San Franciscans are less able to compete for scarce housing units, in part because so many units are not physically accessible to them and in part because the disabled often have lower than average incomes. Housing should be made accessible or adaptable to the disabled to the maximum extent possible. ("Accessible" means that the housing presents no physical barriers to handicapped people. "Adaptable" means housing whose entry and circulation are designed and constructed so that the unit can be made fully accessible by making relatively minor adjustments and additions rather than structural changes.) Housing, whenever possible, should be made adaptable to the disabled and a portion of such housing (the Master Plan goal is at least 10% for city-assisted housing) should be made fully accessible. A minimum of 30 to 40 percent of Mission Bay housing will have elevator access, and a limited portion of additional units are likely to have ground floor entries. Current architectural standards for accessibility will be maintained, and particular attention should be given to location of fully accessible housing in areas with retail and other community serving facilities.

These considerations will be addressed as part of development agreement negotiations.

Employment and Business Opportunities

Employment and business opportunities are another high priority for the City at Mission Bay. The office, S/LI/RD, retail and hotel development at Mission Bay will produce jobs and business opportunities which, to the extent feasible, should be made available to residents of the City, particularly to low and moderate income persons, minorities and women. Types of jobs anticipated at Mission Bay are discussed in Section 5.3.

Programs for employment training must take into account the education employees are generally expected to have. The San Francisco office sector is highly educated, with 63 percent of managers and professionals holding college degrees and

29 percent of nonmanagerial white collar workers. Six percent of white collar office workers have less than a high school diploma. San Francisco's blue collar labor force is relatively well educated with the median having at least a high school diploma. Retail sector jobs are largely sales and associated service occupations. In San Francisco almost 80 percent of retail workers have a high school diploma and more than 20 percent a college degree. San Francisco construction workers are well educated, with at least 75 percent having a high school diploma. A hotel employs a large number of workers in the service sector, with primarily entry-level jobs not requiring extensive education or experience. Most San Francisco hotel service employees have less than a high school diploma.

Mission Bay with 200,000 to 300,000 square feet of neighborhood retail space will provide opportunities for approximately 130 to 200 businesses (at an average of 1,500 square feet for each establishment). Assuming twenty to thirty years for buildout, Mission Bay will accommodate about five to ten new neighborhood businesses each year. The businesses will be phased into the area as the development proceeds. There is an excellent chance for the City and project sponsor to promote businesses essential to neighborhood support and for those seeking small business opportunities. Businesses can be counseled and assisted if necessary to ensure successful enterprises over the long term.

Construction jobs at Mission Bay provide an excellent opportunity for training programs within the union apprenticeship structure. At a ratio of one apprentice for every four journey workers Mission Bay could provide opportunities for more than 100 apprentices annually. Apprentices could be trained and continue their careers at Mission Bay. At an apprentice period of three years, Mission Bay could train more than 800 to 1,000 journey workers.

Further attention will be devoted to employment training and small business opportunities during the next phase of planning and the negotiation of a development agreement. The overall goal is to expand employment opportunities in Mission Bay for San Francisco residents. A fair share of the new jobs generated by Mission Bay development, including design and construction jobs as well as permanent jobs should be made available to minorities, women and other residents of the City. Goals should include promoting opportunities for unskilled and semi-skilled workers and job training programs to impart skills relevant to Mission Bay development. In addition, they should include opportunities for emerging economic activities, an affirmative action network for city resident access to permanent jobs, including goals for resident employment consistent with citywide standards. It may also be appropriate to provide resources to further economic and business development in other commercial districts, particularly in lower income and minority neighborhoods impacted by Mission Bay.

Affirmative Action

The City and project sponsor must to work cooperatively to advance the City's affirmative action goals. City policy calls for encouraging and assisting disadvantaged persons in society in achieving equitable gains in employment and business opportunities, as well as full access to housing and other opportunities of urban life.

Realizing the potential represented by Mission Bay requires positive steps by both the City and the project sponsor. Mission Bay is not a federally subsidized development, and thus is not subject to the federal requirements regarding affirmative action as, for example, that required in a redevelopment project. However, the City expects to contribute to the success of the development in a variety of ways. During the course of negotiating a development agreement, the City will seek the project sponsor's commitment to meeting the City's affirmative action goals by instituting a comprehensive Affirmative Action Plan covering all segments of the project's development.

The Affirmative Action Plan should be developed in conjunction with job training and skill development activities, as described in the preceding section. Such a program should use the expertise of existing City and non-profit agencies. The affirmative action and job training programs should address employment opportunities in Mission Bay's commercial development, and should commence prior to the actual project construction.

An appropriate City role is to provide assistance through its own offices to establish job training programs which meet the needs of potential businesses at Mission Bay, and encourage employers to take advantage of such programs. Existing programs can be used (such as those offered by the Mayor's Office of Housing and Economic Development) to financially assist small businesses owned by minorities and women intending to locate in Mission Bay.

The project sponsor has a variety of options to further affirmative action. The developer can provide minorities and women a share of the professional services (such as the architectural, engineering, construction, and construction management of the project); work cooperatively with the craft unions in implementing long-term apprenticeship programs for minorities and women; and support job training programs. The project sponsor can encourage businesses owned by minorities and women throughout Mission. These and other measures as appropriate will be addressed during development agreement negotiations.

Retail Sales and Service Management

The neighborhood shopping street will be developed in phases with the rest of the development. Shopping streets in other San Francisco neighborhoods have a mix of uses that has evolved over many decades. Many merchants either own their buildings, have a long-term low-rent lease, or have developed a loyal clientele. This history is sometimes critical in enabling established small business to continue in popular shopping areas when other, more current uses such as bars, restaurants, boutiques and video stores can pay higher rents. Mission Bay retail will develop comparatively quickly, and an optimum balance between old and new uses will not occur for many years.

Shopping center managers are concerned about the type and mix of uses needed to attract a broad variety of patrons. Such facilities are usually under a single ownership, and the primary concern is the overall economic return of the complex. Center developers are willing to subsidize particular businesses to improve the overall mix. San Francisco neighborhood shopping streets have many different owners with no unified effort to solicit particular types of businesses. The Department's citywide Neighborhood Commercial Rezoning Study has focused considerable attention on how to retain a mix of uses that serves the surrounding neighborhood. This service concern has been addressed through creative zoning techniques. Overconcentration of uses is discouraged and a diversity of neighborhood-oriented uses encouraged, in order to achieve a greater degree of neighborhood services.

Within Mission Bay, a combination of these approaches will likely be required to enhance the economic feasibility of this portion of the development's commercial component, and ensure the variety of neighborhood-serving uses typical of the City's healthy, balanced neighborhood shopping streets. The project sponsor may wish to retain some control over retail areas, as in a shopping center situation, or use other means to secure a mix of uses. Alternatively, the City may wish to exercise specific zoning powers in this regard. The City and the project sponsor have a shared concern for an economically successful retail street which serves and enhances a very livable, vital residential neighborhood. Negotiations during the development agreement process will address how this may be achieved.

Community and Cultural Services

Mission Bay living and working areas will result in large day and night populations which will need the support of a variety of community and cultural services, such as child care or churches. Specific facilities contemplated at this time are discussed earlier in the report, in Section 5.3.

During the course of refining the plan and negotiating the development agreement, proposals for facilities will be developed further in conjunction with appropriate City and other agencies, interested citizens and other organizations, and the project sponsor. A facility can house a variety of uses, and the actual services provided will require much greater definition and readjustment as needs change.

Phasing is an important issue. School and other needs will be dependent upon the growth of a population in Mission Bay confirming what can only be projected at this point. Flexibility will be required in determining community service needs because all aspects, such as health care needs, are very dependent upon the type of population. The mobile, young population Mission Bay may attract at the outset will have very different needs from the senior citizens they will ultimately become. The methods by which community services and cultural facilities are constructed, operated, and maintained over time need to be addressed in future phases of the planning, including the development agreement negotiations.

Transportation Systems Management (TSM)

City policy calls for a comprehensive Transportation Systems Management (TSM) Program for a development such as Mission Bay. On-site transportation brokerage services should be employed to implement the program in close cooperation with the Department of City Planning, Municipal Railway, Department of Public Works and other agencies. A TSM Program should include comprehensive strategies to progressively reduce the use of automobiles by Mission Bay employees, residents and visitors for both commute and non-commute transportation needs.

The functions of a transportation broker are to coordinate TSM programs. A broker works with Muni, SamTrans, AC Transit, Golden Gate Transit, CalTrain, BART, and other agencies to provide and continually improve direct transit services to the site. A broker works to increase transit use by project employees, residents and visitors by actively marketing transit services through on-site sale of tickets, providing schedules and related information on-site, and by other transit promotional activities. A broker works with individual employers and/or developers to encourage subsidy of transit passes and tickets for sale to employees. A broker works with tenants to encourage alternative work hours that will decrease peak hour trips. A broker promotes ridesharing by encouraging employees to use carpools and vanpools for commuting, by providing reduced van/carpool parking rates and an increasing number of preferential rideshare parking spaces, and by working with RIDES for Bay Area Commuters and with other ridesharing organizations to improve, expand and coordinate the use of ridesharing. In Mission Bay a broker would participate in parking management to design, provide and operate parking areas to assure an adequate number of short-term and preferential spaces for ridesharing, as well as to limit parking for single-occupant vehicles commuters according to adopted goals.

A transportation systems management program for Mission Bay will be developed as part of the development agreement negotiations.

Seismic Safety/Emergency Preparedness and Response

Mission Bay will have new buildings meeting contemporary standards that in spite of the poor soils in the area, will be safer than many other buildings in the City where soil conditions are better. However, seismic safety remains a serious issue in Mission Bay, as elsewhere in the City.

An evacuation and emergency response plan will be developed by the project sponsor consistent with City policy. Ultimately all building developers within Mission Bay should participate in this response plan. The plan will be prepared in consultation with the Mayor's Office of Emergency Services, to ensure coordination between the City's emergency planning activities and the Mission Bay development plan. A more detailed response plan will be developed in conjunction with the Mayor's Office of Emergency Services as Mission Bay planning continues.

Energy

Energy conservation is important for a large development such as Mission Bay. Opportunities may include a centralized district heating and cooling system as well as building configuration and design to maximize energy efficiency. Additional energy conservation policies and guidelines will be considered during refinement of the plan, and will be the subject of negotiations during the development agreement discussion.

Energy conservation issues for Mission Bay include three basic areas:

1. The Site--larger scale project issues affecting the layout of buildings and open space.

2. Buildings--opportunities in the planning and organization of buildings; the building envelope and construction.

3. Building service systems--achieving efficiency in the energy consuming service systems in buildings.

The Department will work with the Bureau of Energy Conservation of the City's Public Utilities Commission in developing this program.

Business Relocation

The Mission Bay site includes about 110 businesses and 1,700 employees. This includes Port land, Santa Fe Pacific land, three smaller parcels under separate ownership, and such public agency uses as the Caltrain Station and the Clean Water Program's Channel Pump Station. (See Appendix 1 for ownership patterns.)

Most of the businesses are under short-term leases, and many are relatively new to the area (two-thirds have been there five years or less). Nevertheless, public policy in the Central Waterfront Plan calls for some degree of assistance where displacement of industrial and, in particular, maritime uses are concerned. Further, the Commerce and Industry Element calls for relocating desired firms within the City when public actions displace existing viable industrial firms. Businesses in the area are not eligible for public relocation services, as public ownership or development of the land is not generally contemplated in Mission Bay planning. Nevertheless, it is in the City's overall interest to ease the transition for these businesses. The goal would be to assist and encourage such firms to find other appropriate locations within the Central

Waterfront area and elsewhere in San Francisco. This would be to the advantage of the businesses, their employees, the Port, other businesses that benefit from the services they provide, and the City economy. This is particularly important for maritime uses which have a close relationship with the Port.

This issue will be addressed further during the development agreement negotiation phase.

Public Art

The City has long-established precedent in public art in large-scale planning such as redevelopment areas, and for public buildings. More recently, the Downtown Plan includes a requirement for public art associated with office development. Provision of such publicly-accessible art within Mission Bay would add interest to enrich the lives of its residents, workers and visitors. It will complement the cultural facilities to be provided.

A program for public art will be developed during the next phase of plan refinement and negotiation of a development agreement.

Capital Improvements Program

Mission Bay requires a substantial investment in infrastructure, including streets, utilities, bridges, freeway ramp demolition and reconstruction, and park development and landscaping. Transit access is critical to its success. Further improvements to water quality within China Basin Channel may be required.

A detailed capital improvements program and financing plan will be developed in the next phase of planning. The financing of the capital improvements and their phasing and maintenance will be the subject of development agreement negotiations.

ACHIEVING THE PLAN

6. Achieving the Plan

The plan requires many public actions before approval. And once approval is achieved, many years will be required before Mission Bay is fully constructed and transcends the appearance of a new development to become another of San Francisco's distinctive neighborhoods. This section describes public actions necessary for the approval and implementation of the plan.

6.1 THE DEVELOPMENT CONTRACT

San Francisco leads major cities nationwide in requiring that new development provide public benefits. For projects involving the scope and complexity of Mission Bay, State law authorizes cities and project sponsors to negotiate development agreements as part of a development's approval process. This allows assurances for both public benefits and the project sponsor's right to complete a phased project. Such an agreement offers a vehicle for both the project sponsor and City to set forth and agree upon their mutual expectations at the time of project approval. A development agreement guarantees to the extent possible that over time the expectations of both City and project sponsor will be realized.

The development agreement provides a level of certainty to a project sponsor that a project approved in principle at the outset can be built in multiple phases to completion, even as laws and regulations change. It provides similar certainty to a City that the development it approves will provide, by contractual arrangement, the desired benefits to the public. There are other means by which both the project sponsor and City can achieve their goals. A development agreement, however, is a direct and straightforward approach relying upon the mutual resolution of issues at the outset and a contract to ensure all agreements are carried out.

The Mission Bay Plan and its physical, social and economic components, and accompanying development control plans and design guidelines, will be the subject of negotiations with Santa Fe Pacific, this project's sponsor. The Department expects negotiations with Santa Fe Pacific to culminate with the contractual arrangement of a development agreement. While such an agreement is a two-party negotiation between the City and project sponsor, the Department will solicit views from the community. This will help the Department define and negotiate a series of issues reflecting the interests of a broad spectrum of community constituencies. These issues include housing mix (affordability, accessibility, tenure), employment and business opportunities, job training, affirmative action, and community and cultural services.

These negotiations will begin shortly after the publication of this report, and continue through adoption of the plan and implementation programs by the City. The Department, City Attorney's Office and other appropriate City officials and agencies will represent the City in these negotiations. Any development agreement will require consideration and approval by the City Planning Commission, Board of Supervisors and Mayor.

6.2 PROPOSITION M

Proposition M, approved by the electorate November 4, 1986, established Priority Policies for inclusion in the City Planning Code, a permanent annual limit on office development, and a resident employment training and placement program. The Priority Policies are to be included in the Planning Code, and the Mission Bay Plan as well as any other projects proposed for City approval must be consistent with those policies. The policies are as follows:

1. That existing neighborhood-serving retail uses be preserved and enhanced and future opportunities for resident employment in and ownership of such businesses be enhanced;
2. That existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods;
3. That the City's supply of affordable housing be preserved and enhanced;
4. That commuter traffic not impede Muni transit service or overburden our streets or neighborhood parking;
5. That a diverse economic base be maintained by protecting our industrial and service sectors from displacement due to commercial office development, and that future opportunities for resident employment and ownership in these sectors be enhanced;

FRANCIS 'LEFTY' O'DOUL
BRIDGE

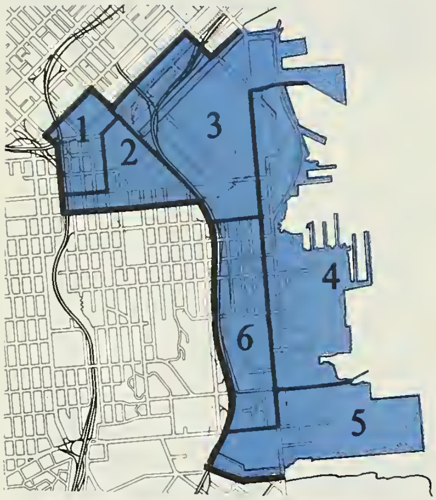
6. That the City achieve the greatest possible preparedness to protect against injury and loss of life in an earthquake;
7. That landmarks and historic buildings be preserved; and
8. That our parks and open space and their access to sunlight and vistas be protected from development.

It is the Department's intent in planning Mission Bay that these policies be met. Over the next several months, experience in administering these policies will add to the Department's ability to determine precisely how they are to be interpreted with respect to Mission Bay. The Department believes the plan presented in this report will be judged consistent with these policies.

Proposition M's annual limit on office development continues the present 950,000 square foot annual office limitation until such time as it is repealed by the voters. It reduces that amount for an interim period, however, to 475,000 square feet annually, to compensate for office square footage approved after adoption of the Downtown Plan. Of the 475,000 square feet of new approvals allocated annually, 75,000 square feet would be reserved for office developments between 25,000 and 49,999 square feet (smaller developments are exempted). Thus, Mission Bay office space would have to compete in the interim period with other office development in the City for 400,000 square feet of an annual approval ration. This compares with about 200,000 square feet of Mission Bay office space estimated to be absorbed under normal market conditions annually. The additional 475,000 square feet of the 950,000 square foot annual approval ration would become possible to approve once the office square footage approved after adoption of the Downtown Plan has in effect "recycled through" and been accounted for in the total annual allotment of 950,000 square feet. Mission Bay could compete for a share of this larger ration some ten years hence.

Alternatively, Proposition M contains a provision for voter approval that would exempt office projects authorized by development agreements. An exemption for Mission Bay pursuant to this provision, if approved by the electorate, would enable Mission Bay office development to proceed without competing with other City office development for a share of the allotment described above.

The third provision, resident placement and training, requires the City to adopt legislation to establish a program to coordinate job training and placement efforts of public and private agencies, to assure maximum use of existing programs and development of any additional programs deemed necessary. Should the Board of Supervisors determine that additional funds are needed for such programs, it is required to consider adoption of a San Francisco Resident Training Fee of not less that $1.50 per square foot for new office development exceeding 50,000 square feet. The increased coordination of existing programs and possible creation of new programs may enable Mission Bay commercial development to employ more City residents. This would also be anticipated under the Employment and Business Opportunities programs discussed in Section 5.5.



1 Showplace Square Area
2 North Potrero Area
3 China Basin Area
4 Central Basin Area
5 Islais Creek Area
6 Lower Potrero Area

6.3 MASTER PLAN, CITY PLANNING CODE AND ZONING MAP AMENDMENTS

The Mission Bay Plan requires amendments to the City Master Plan and zoning ordinances. This plan for Mission Bay, as described in Section 2.3, will be the subject of a variety of public hearings and forums throughout the City. The Department will refine and adjust the plan following extensive public debate. It will propose master plan and zoning amendments as part of those modifications. These amendments will incorporate the Development Controls and Guidelines contained in Section 7 of this report.

Following final plan modifications, the Department will propose amendments for City Planning Commission action regarding the Central Waterfront Plan and other Elements of the Master Plan. The Department will prepare companion amendments to the City Planning Code and Zoning Map, for consideration and action by the Commission, Board of Supervisors and Mayor. All proposed changes will be the subject of various public hearings with the opportunity for full public involvement.

6.4 ENVIRONMENTAL IMPACT REPORT

The Department is preparing an environmental impact report (EIR) analyzing the environmental effects of a variety of alternatives for Mission Bay development. The alternatives are similar to the plan but provide a range of land uses. This analysis will include forecasts of City and regional growth and its impacts. This work will enable Mission Bay impacts to be judged in the context of what conditions will be like as the project develops, both in the year 2000 and at buildout a decade or two later. The EIR will include measures to mitigate these impacts which can be factored into the Mission Bay Plan. The Draft EIR will have broad public review. The Department will respond to all comments in revising the document to be a Final EIR.

6.5 MARITIME EXCHANGE

The Port of San Francisco has a major role in this plan, as about 30 acres of the Mission Bay site east of Third Street are within the Port's jurisdiction, and another eight acres of its land are integral to the plan's full execution. The Port's maritime goals, already discussed in Sections 3, involve an exchange of Port land for other property. The Port must be provided the financial means to acquire privately-owned property north of Pier 80. This could be accomplished by the sale at fair market value of the Port property east of Third Street and acquisition of the needed property with the proceeds. There may be other techniques as well. This issue will be considered in negotiating the development agreement. Any such exchange should be accompanied by the creation of a Maritime zoning use district to reflect the Port's program for maritime development. Section 5.4 describes how the plan would be affected if this Port land were not exchanged but retained and kept in reserve for a future container terminal.

6.6 OTHER CITY ACTIONS

The plan proposes the creation of substantial public infrastructure, community services, transit services, and social and economic programs such as affordable housing. Implementation of these various efforts will require coordination and action by virtually all major City agencies. They have participated over the past year in several City Agency Task Forces formed to help prepare the plan presented here.

The Department of Public Works and Public Utilities Commission/Water Department have a large role in many of these decisions because substantial physical infrastructure and extensive public utilities are required. They include streets, water, sewerage and other facilities. The Department of Electricity is involved as well. The Clean Water Program must participate should decisions be needed on further reduction in sewage overflows into the Channel.

The transit service proposed as part of this plan falls under the Public Utilities Commission and its Municipal Railway. The transit service will have implications for Muni services far removed from Mission Bay, and affect the travel patterns of many transit riders. Consequently the Muni service proposals will be the subject of further review and public discussion before action on these proposals by the Public Utilities Commission and Board of Supervisors.

Several units in the Mayor's Office will have a major role in further defining and ultimately implementing a number of the social and economic components, including affordable housing, described in Section 5.5. The Human Rights Commission will take a lead role in affirmative action, and the Private Industry Council in employment programs.

The open space system and recreational facilities require various Recreation and Park Department decisions regarding ownership, development and maintenance.

Community services require the active participation of the Fire Department, Police Department, Department of Public Health, Department of Social Services, Public Library, and Unified School District. The Art Commission has jurisdiction over any public buildings to be constructed, and has a special role with regard to any cultural facilities to be provided.

The Real Estate Department has a designated role for the City with respect to public lands and will continue its involvement throughout the process.

6.7 ACTIONS BY REGIONAL, STATE AND FEDERAL AGENCIES

The plan assumes amendment of the BCDC and MTC Seaport Plan, as described in Section 3. Such an amendment would delete the Port Priority designation from Piers 48 through 64 and relocate the designated Near-Term Terminal to the private lands between Pier 70 and the Pier 80/Uplands Realty Corporation area. State Lands Commission approval, and perhaps that of the State Legislature as well, would be required for any transfer of the public trust from Port land to other property the Port may seek to acquire in exchange.

The plan's interim Caltrain Station at Seventh and Channel Streets, and the ultimate Caltrain extension downtown, require action by the California Transportation Commission, MTC and the State Public Utilities Commission. A variety of public funding sources likely would be required to finance the extension, including the federal Urban Mass Transportation Administration. The signatories to the existing agreement for services, including Caltrans and San Mateo and Santa Clara counties, also have a role in any changes in Caltrain service.

Demolishing the I-280 freeway off-ramp and stub end and reconstructing new ramps on King Street require action by Caltrans. The funding arrangements for this will likely include public funds for reconstruction (I-280 Transfer Concept Program), and private funds for its demolition (Mayor's Letter to Southern Pacific).

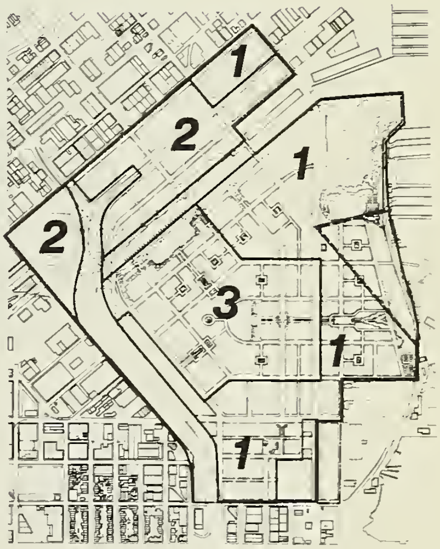
The plan's low-level Owens Street bridge by the freeway technically restricts the navigability of the Channel, and requires approval of the U. S. Coast Guard. The pedestrian bridge at Fifth Street would require Coast Guard review, to ensure that it opened satisfactorily and did not adversely affect navigability. The U. S. Corps of Engineers has permit authority over any dredging in the Channel during the course of bank restoration or wetlands habitat creation.

As Mission Bay develops, a variety of state and federal funding sources, as well as non-governmental entities, will be tapped whenever possible to assist in the successful implementation of the plan's social and economic components.

6.8 PHASING

Mission Bay will probably be built out over the next twenty to thirty years, in phases each including a variety of land uses. The phasing should be designed to ensure that the housing, open space, infrastructure, community services and other public amenities are constructed in a timely manner. At the same time, it is desirable to ensure that each phase of development is viable and self-sustaining. For example, a housing phase should have associated retail services and open space. The development agreement will set forth specific phasing provisions.

Numerous factors influence phasing. For example, the availability of suitable land is one significant factor influencing when phases of development will occur. In the accompanying precedence diagram the general availability of Mission Bay land suitable for development is illustrated. This diagram shows three different conditions. This includes *(1) land with no major physical encumbrances* which could be developed soon, adjacent to existing streets and utilities and next to healthy existing development or amenities. Next is *(2) land with one major physical encumbrance* that must be removed before site development can occur or where an earlier adjoining phase of Mission Bay must occur to establish the area as a desirable neighborhood. Land in this condition includes the blocks north of the Channel from which I-280 or Caltrain tracks must be removed before development is feasible, and any parcels with tenants with long-term leases that cannot readily be broken. This category also includes lands centrally located in Mission Bay which may not be successful without earlier developments around them, surrounded as they are by older industrial uses and serviced by older infrastructure. *(3) Land with two or more encumbrances* is least likely to develop early. Under this scenario, areas in the center of the site would be developed after at least two adjoining areas have been built. Amenities such as open space and safe streetscapes must reach these areas before their full development potential can be realized.



To ensure healthy development, the plan takes into account the need to build out in a series of self-sustaining phases. Thus, the site was planned so that housing areas with associated open space and retail could be built in phases and offices with ancillary shops, services and open space could be self-sustaining. Infrastructure and amenities developed in each phase should anticipate the design and facilitate the construction of the ensuing phases.

A balance between housing and employment opportunities should be achieved in each phase. Furthermore, each phase should include a mixture of market rate and affordable housing units. Open space and community services need to be integrated as well. With these principles in mind, Phase One development which would occur during the first years of construction would provide, for example, (1) 500-600 dwelling units, including affordable units; (2) about 500,000 square feet of office; (3) bank and park improvements along China Basin Channel especially near the housing; (4) initial retail shops and services in both areas and (5) improvement to the necessary streets and utilities in and around these areas, both as necessary to support the immediate uses in that phase and to facilitate the subsequent development. This is the type of balance of housing, open space, commercial development and infrastructure sought in each phase.

Early phases will establish the character of the new Mission Bay area. For this reason, the development must be of a high quality and must meet public needs such that it is successful in both social and market terms. Phasing should be achieved in a manner that encourages the ultimate completion and buildout of Mission Bay. Community services need to be phased in a way that is responsive to the level of development and evolving needs in Mission Bay.

Portions of Mission Bay may be developed with interim uses. For example, the S/LI/RD areas may be planned for a higher density development in the future than existing market conditions can produce. Consequently, such areas may develop initially at lower densities, only to be redeveloped later when market conditions warrant. As long as housing and other City goals are not jeopardized by such staged development, it should be accommodated within Mission Bay.

As Mission Bay develops, no doubt its residents, workers and other groups will quickly develop an interest in their growing neighborhood. Their desires will be an important factor in the programming of community and cultural facilities and open space areas, and may influence other facets of the Mission Bay Plan as well.

Mission Bay following its buildout will have the same needs as other communities within San Francisco for change to address new circumstances. Owners, residents, and businesses may wish to convert one use to another, add additional units, request variances and conditional uses, and otherwise seek to adapt their community in a myriad of ways. This plan is designed to respond to such changes over time.

DEVELOPMENT CONTROL PLANS AND DESIGN GUIDELINES

7. Development Control Plans and Design Guidelines

Development control plans and design guidelines together describe development controls for Mission Bay.

The intent of these control plans and guidelines is to provide as much latitude in program and design of individual projects as is possible while still ensuring the achievement of overall project goals and commitments as described in Chapters 3, 4, and 5. General building and open space visual character is described through photographs and sketches intended to give direction, but allow for individual project design distinction.

These plans and guidelines will be incorporated, as appropriate, in the Planning Code, the Mission Bay Area Plan, other elements of the Master Plan, and/or the Development Agreement to be developed in the next phase of planning.

7.1 DEVELOPMENT CONTROL PLANS

Development control plans are intended to set site specific planning controls and reference applicable design guidelines. In addition the first two development control plans illustrate different aspects of one possible planning solution that satisfies both the following guidelines and the program.

Ten control plans are included as follows:

7.1.1 Illustrative Plan

Illustrates one possible building massing solution.

7.1.2 Open Space and Public Areas Illustrative Plan

Illustrates one possible solution for public open spaces at grade in addition to retail, community and cultural facilities.

7.1.3 Program By Block

Defines program per block to meet overall project program commitment.

7.1.4 Use Districts

Describes categories which allows the Mission Bay program as defined previously as well as other conditional uses.

7.1.5 Building Heights Plan

Sets maximum building heights for all building parcels.

7.1.6 Building Reference Plan

References building design guidelines applicable to each block.

7.1.7 Housing Zones Reference Plan

References housing zones by block to the design guidelines.

7.1.8 Rights-of-Way and Streets Reference Plan

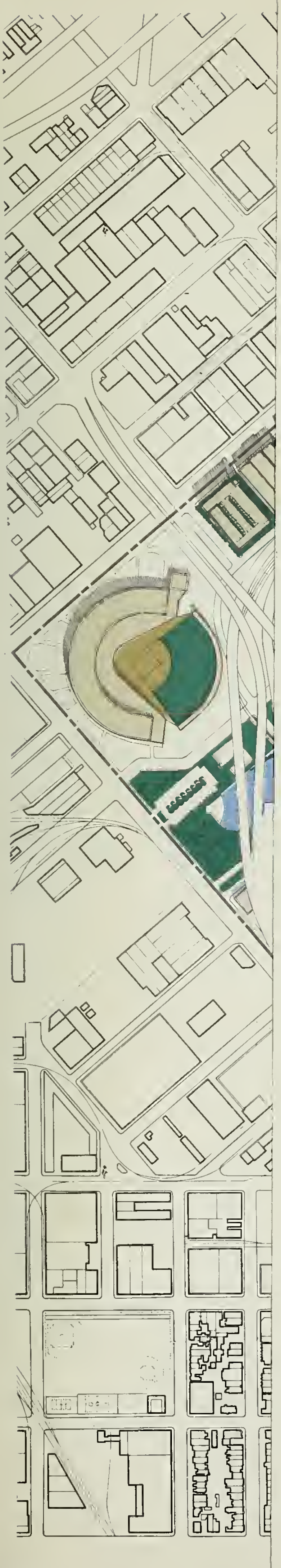
Illustrates all mandatory rights-of-way which are to serve as circulation ways as well as major underground utility corridors.

7.1.9 Open Space Reference Plan

References all open spaces other than streets to the open space design guidelines.

7.1.10 Special Building Elements Reference Plan

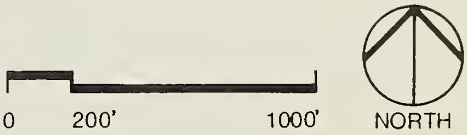
Illustrates site axis conditions and references those building elements which have special design considerations in addition to the general guidelines applicable to a building type.



Illustrative Plan

Mission Bay

Figure 9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NORTH

Illustrative Plan

Mission Bay

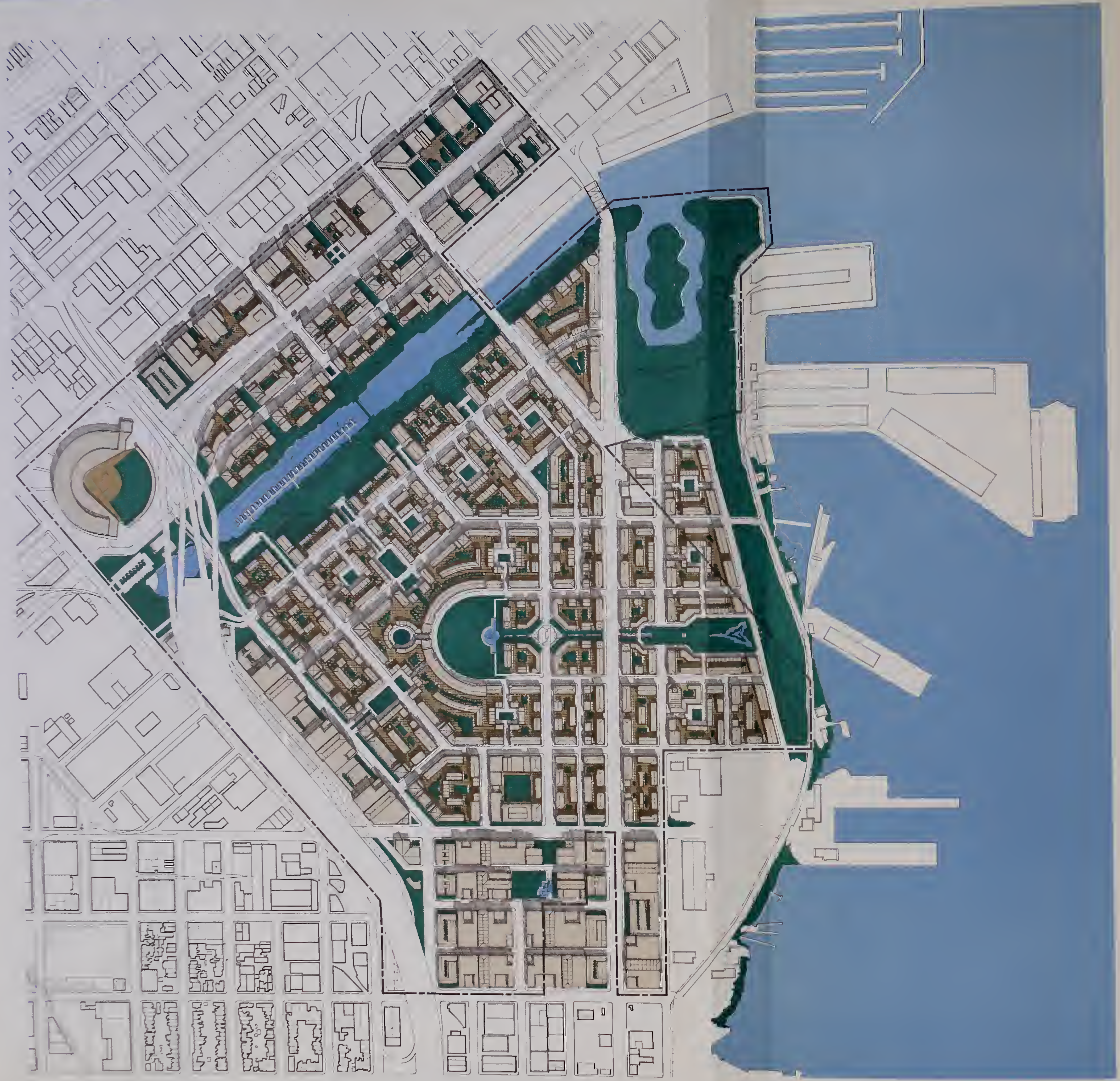

Figure 9

0
200'
1000'
NORTH

Open Space and Public Areas Illustrative Plan

Mission Bay

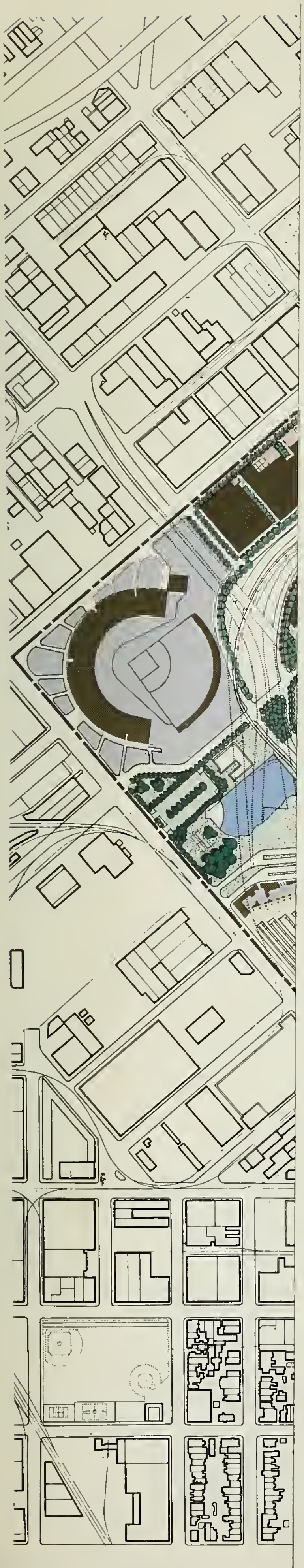

Figure 10

0
200'
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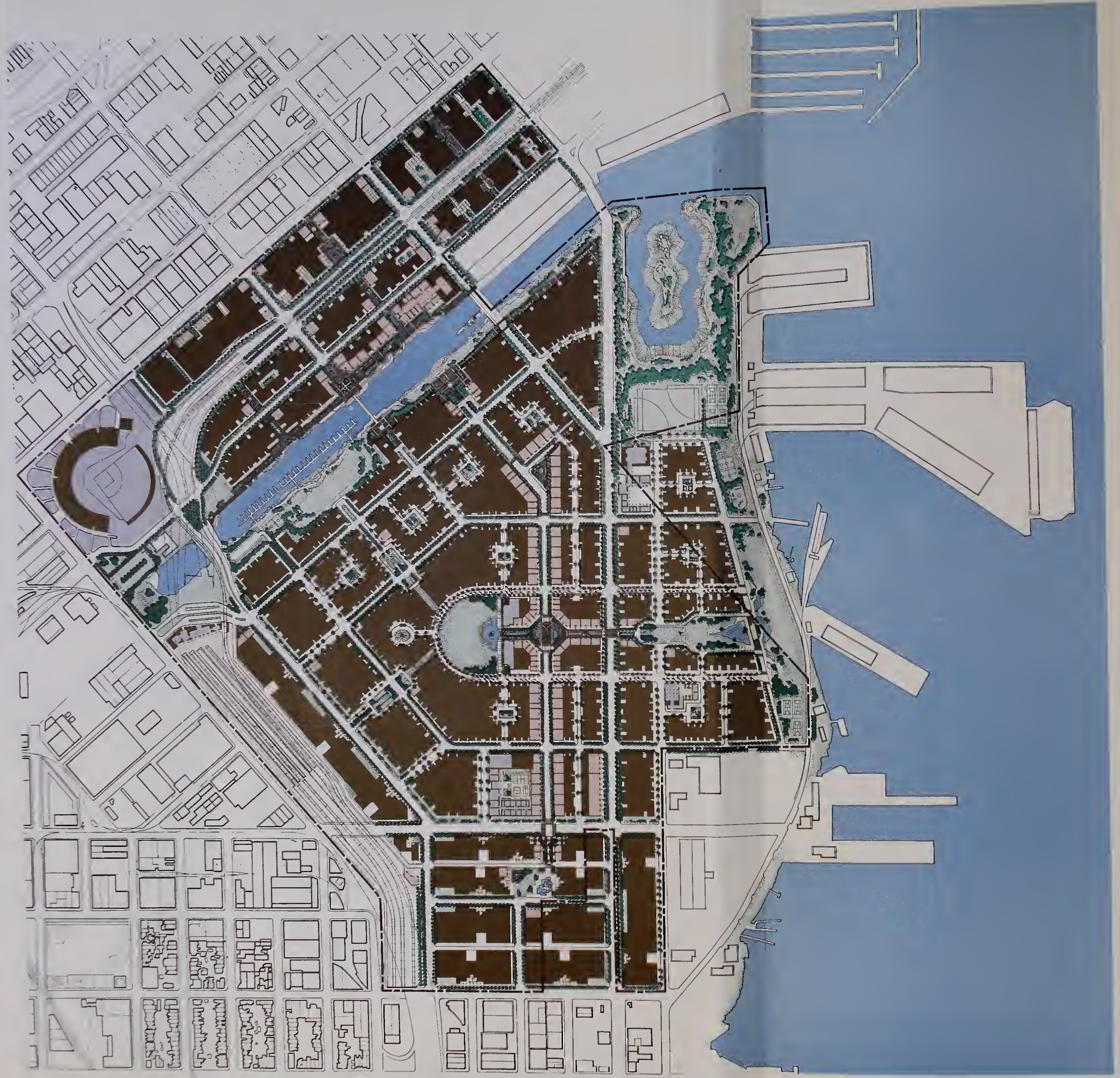
NORTH

Open Space and Public Areas Illustrative Plan

Mission Bay


0
200'
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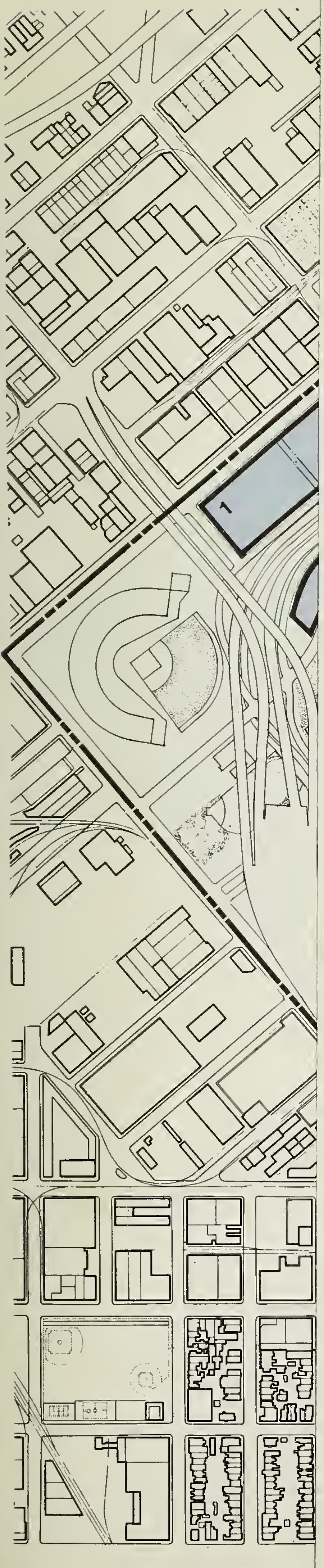
NORTH

Figure 10



Building Program by Block

Mission Bay

Block	
1	1,000,000-1,100,000*s.f. Office
2	1,000,000-1,200,000*s.f. Office
3	1,000,000-1,100,000*s.f. Office
4	405 D.U.
5	600 D.U.
6	600,000 s.f. Office
7	190 D.U.
8	215 D.U.
9	110 D.U.
10	500,000 s.f. Hotel
11	130 D.U.
12	95 D.U.
13	100 D.U.
14	170 D.U.
15	170 D.U.
16	530 D.U.
17	925,000 s.f. SLIRD
18	300 D.U.
19	215 D.U.
20	215 D.U.
21	320 D.U.+ Commercial
22	230 D.U.+ Commercial
23	190 D.U.+ Commercial
24	Community and Cultural Facilities
25	150 D.U.**
26	355 D.U.
27	800 D.U.
28	110 D.U. + Commercial
29	120 D.U.+ Commercial
30	110 D.U. + Commercial
31	95 D.U. 110 D.U.**
32	275 D.U.
33	15 D.U. + Commercial + Community and Cultural Facilities
34	75 D.U.+ Commercial
35	45 D.U. + Commercial
36	85 D.U.
37	15 D.U. + Commercial + Community and Cultural Facilities
38	75 D.U. + Commercial
39	45 D.U. + Commercial
40	85 D.U.
41	110 D.U. + Commercial
42	120 D.U.+ Commercial
43	110 D.U. + Commercial
44	170 D.U.
45	150 D.U.
46	300 D.U.
47	School+ 20 D.U.+ Commercial
48	105 D.U. +Commercial
49	150 D.U.+Commercial
50	950,000 - 1,185,000*s.f. SLIRD (including 50-58 except 52)
52	380,000-400,000*s.f. SLIRD
59	45,000-90,000*s.f. SLIRD

* Achievement of higher densities in these ranges depends on design, open space, transportation and parking issues to be finalized in Development Agreement.

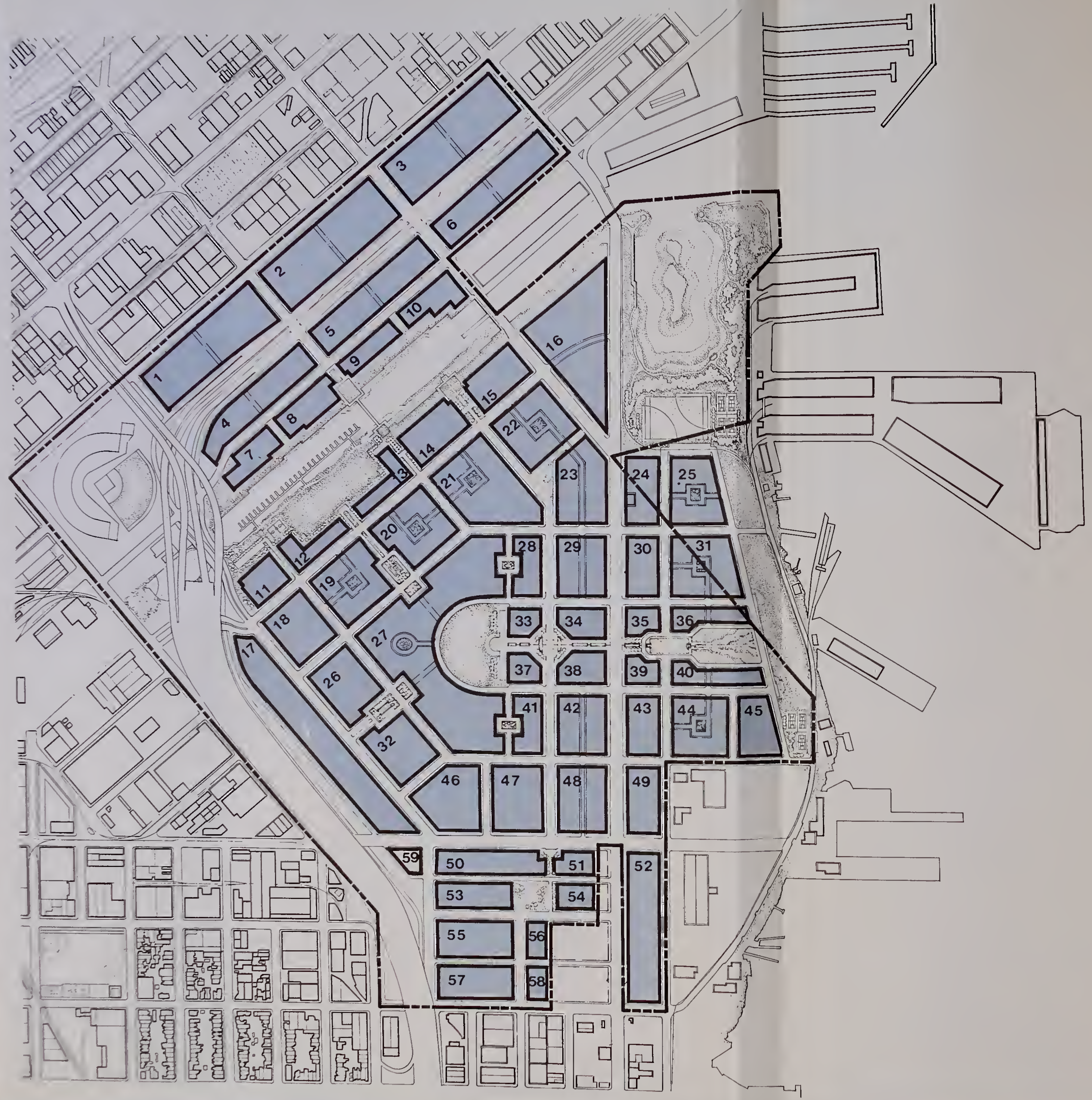
**Not included in program totals

Notes: Commercial total of approximately 250,000 s.f. of Neighborhood Retail plus possible added Large Scale Retail

Community and Cultural Facilities total of approximately 200,000 s.f.

Figure 11

0
200'
1000'
NORTH



Building Program by Block

Mission Bay

Block	
1	1,000,000-1,100,000*s.f. Office
2	1,000,000-1,200,000*s.f. Office
3	1,000,000-1,100,000*s.f. Office
4	405 D.U.
5	600 D.U.
6	600,000 s.f. Office
7	190 D.U.
8	215 D.U.
9	110 D.U.
10	500,000 s.f. Hotel
11	130 D.U.
12	95 D.U.
13	100 D.U.
14	170 D.U.
15	170 D.U.
16	530 D.U.
17	925,000 s.f. SLIRD
18	300 D.U.
19	215 D.U.
20	215 D.U.
21	320 D.U.+ Commercial
22	230 D.U.+ Commercial
23	190 D.U.+ Commercial
24	Community and Cultural Facilities
25	150 D.U.**
26	355 D.U.
27	800 D.U.
28	110 D.U. + Commercial
29	120 D.U.+ Commercial
30	110 D.U.+ Commercial
31	95 D.U. 110 D.U.**
32	275 D.U.
33	15 D.U.+ Commercial - Community and Cultural Facilities
34	75 D.U.+ Commercial
35	45 D.U.+ Commercial
36	85 D.U.
37	15 D.U. + Commercial - Community and Cultural Facilities
38	75 D.U. + Commercial
39	45 D.U. + Commercial
40	85 D.U.
41	110 D.U. + Commercial
42	120 D.U. + Commercial
43	110 D.U. + Commercial
44	170 D.U.
45	150 D.U.
46	300 D.U.
47	School+ 20 D.U + Commercial
48	105 D.U.+Commercial
49	150 D.U.+Commercial
50	950,000 - 1,155,000*s.f. SLIRD (including 50-58 except 52
52	380,000-400,000*s.f. SLIRD
59	45,000-90,000*s.f. SLIRD

* Achievement of higher densities in these ranges depends on design, open space, transportation and parking issues to be finalized in Development Agreement.

**Not included in program totals

Notes: Commercial total of approximately 250,000 s.f. of Neighborhood Retail plus possible added Large Scale Retail

Community and Cultural Facilities total of approximately 200,000 s.f.

Figure 11

0 200' 1000' NORTH

Use District Plan

Mission Bay

1	Office
2	Hotel
3	Midrise Housing
4	Public
5	Lowrise Housing
6	Neighborhood Retail
7	Large Scale Retail
8	Service/Light Industrial/Research and Development
9	Maritime
10	Ballpark

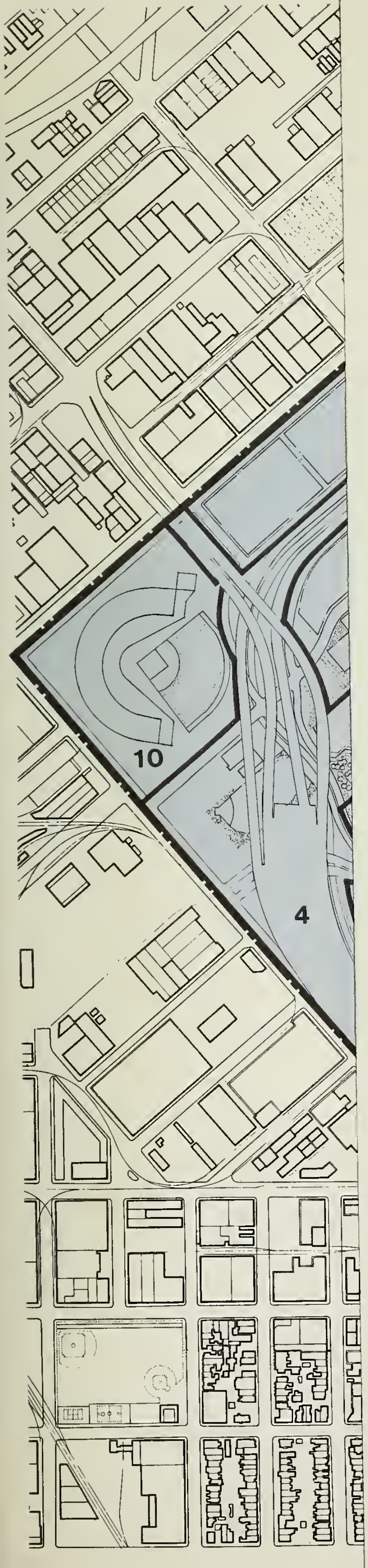
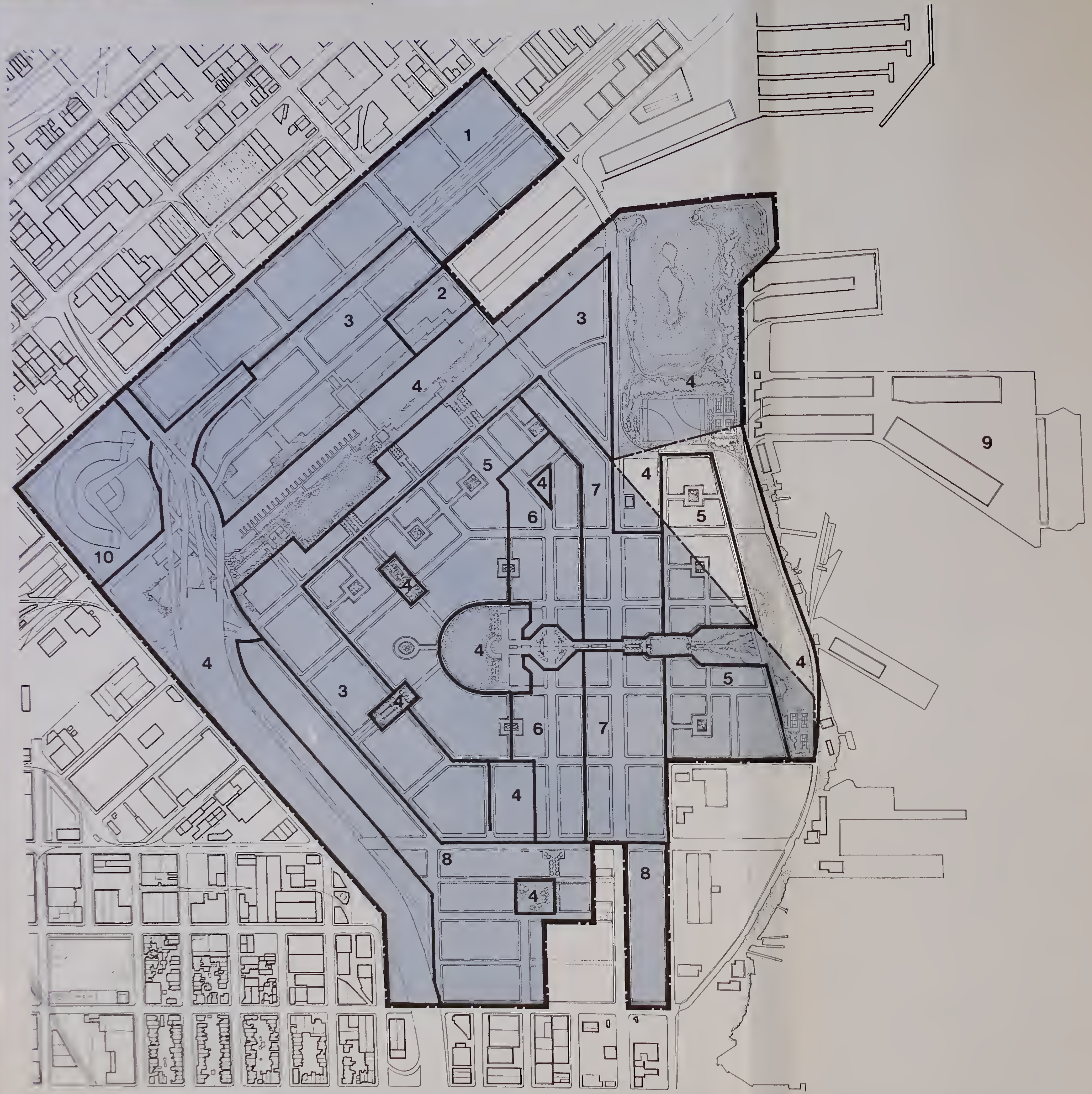


Figure 12

Use District Plan

Mission Bay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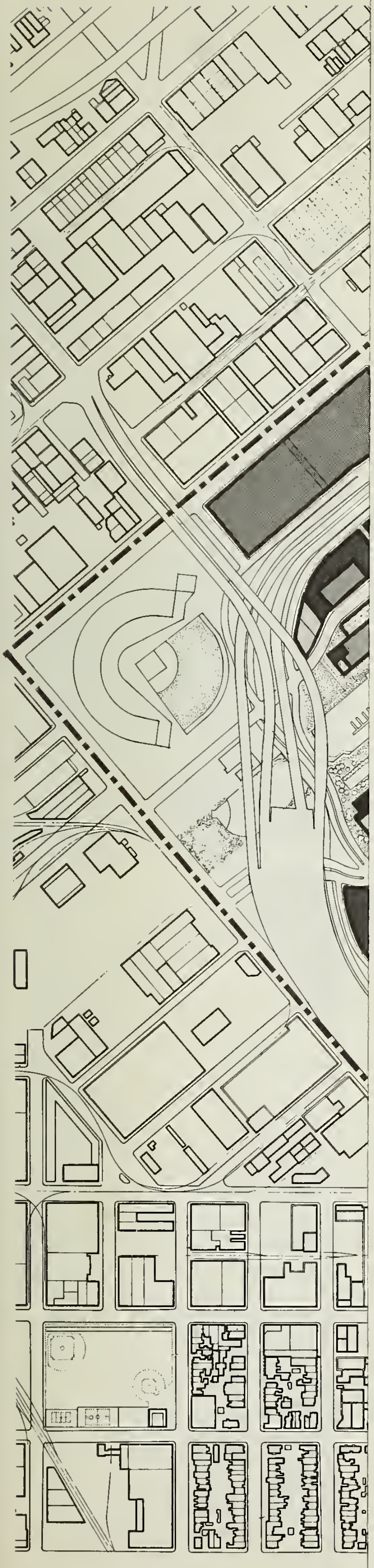
8
4
8
9

1 Office
2 Hotel
3 Midrise Housing
4 Public
5 Lowrise Housing
6 Neighborhood Retail
7 Large Scale Retail
8 Service/Light Industrial/Research and Development
9 Maritime
10 Ballpark

Figure 12

0 200' 1000'

NORTH



Maximum Building Heights

Mission Bay

■ 40′ Limit

□ 45′ Limit

▨ 50′ Limit

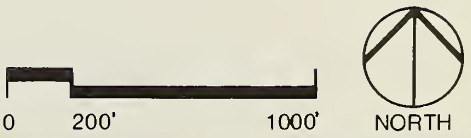
▒ 55′ Limit

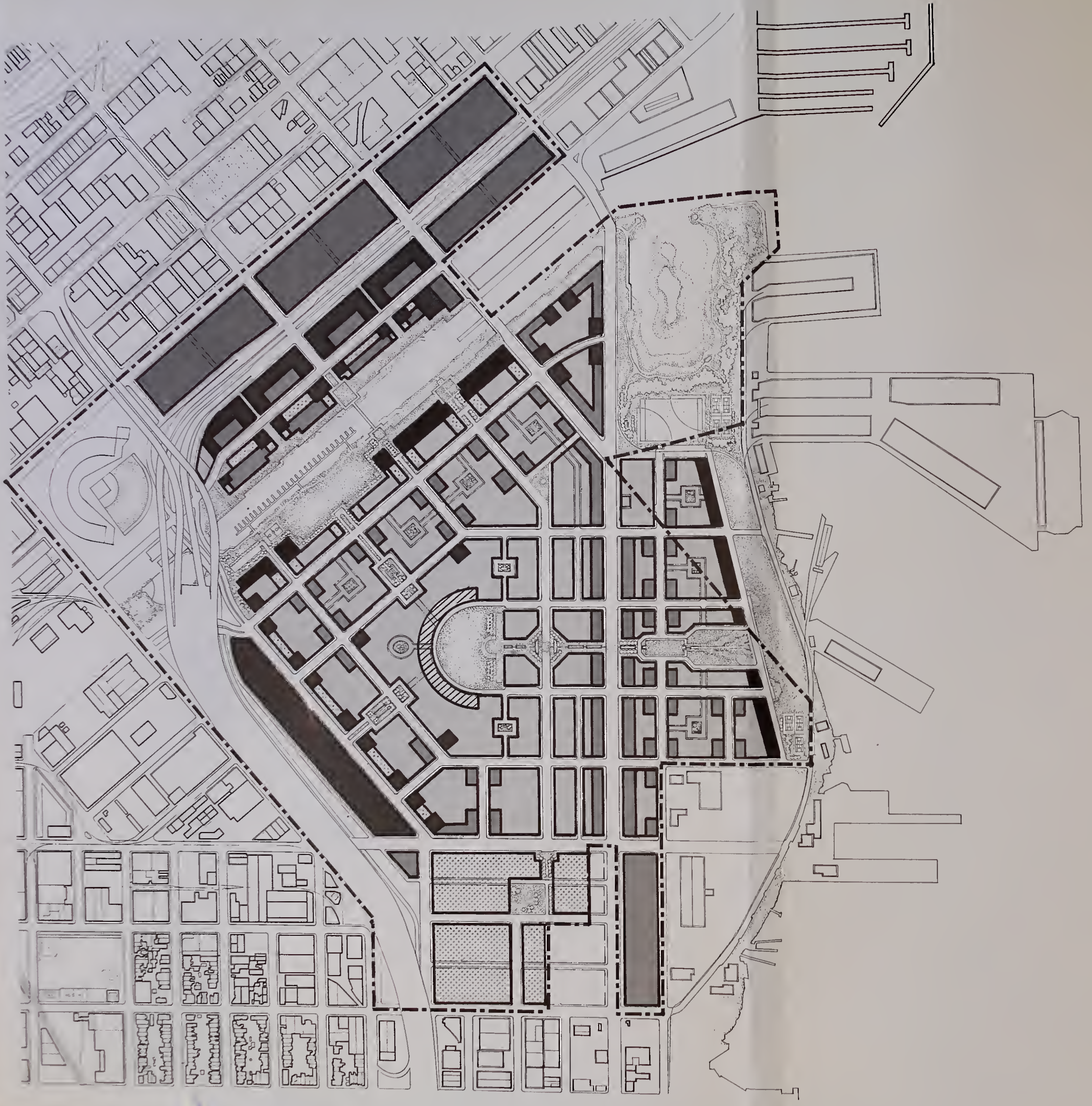
░ 65′ Limit

■ 85′ Limit

▩ 105′ Limit

Figure 13


0
200'
1000'
NORTH

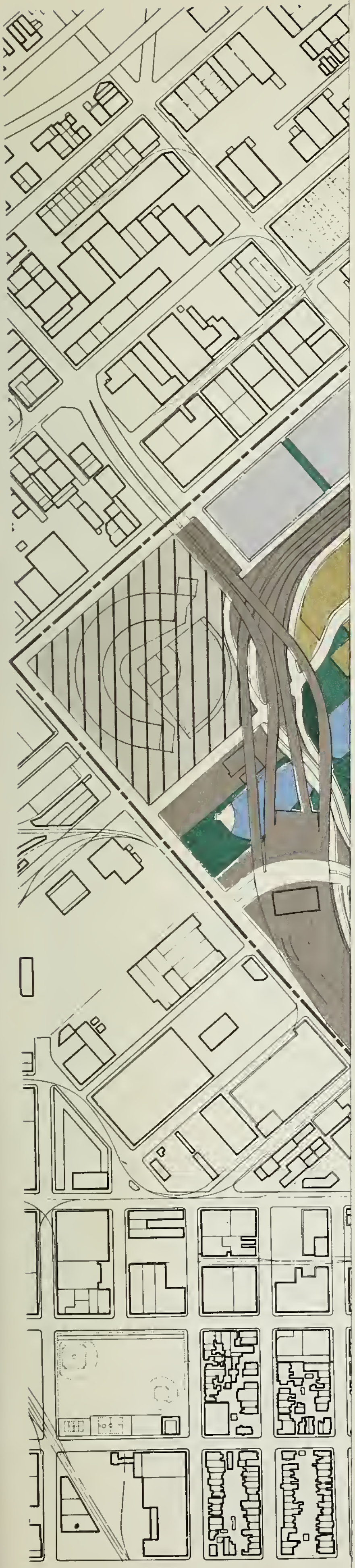


Maximum Building Heights

Mission Bay

■	40′ Limit
□	45′ Limit
▨	50′ Limit
▩	55′ Limit
░	65′ Limit
■	85′ Limit
▩	105′ Limit

Figure 13



Building Reference Plan

Mission Bay

⬜	Housing - Low Density See 7.2.2
🟨	Housing - High Density See 7.2.3
⬜	Office See 7.3
🟦	Service/Light Industrial/R&D See 7.4
⬜	Housing w/Neighborhood Retail Below See 7.2.2.5
🟥	Housing w/Large Scale Retail Below See 7.2.2.5
▥	Hotel See 7.9
⬜	Community/Cultural Facilities See 7.8
▥	Ball Park See 7.10
◼	Other
🟩	Open Space
🟦	Water

Figure 14

0
200'
1000'
NORTH

Building Reference Plan

Mission Bay

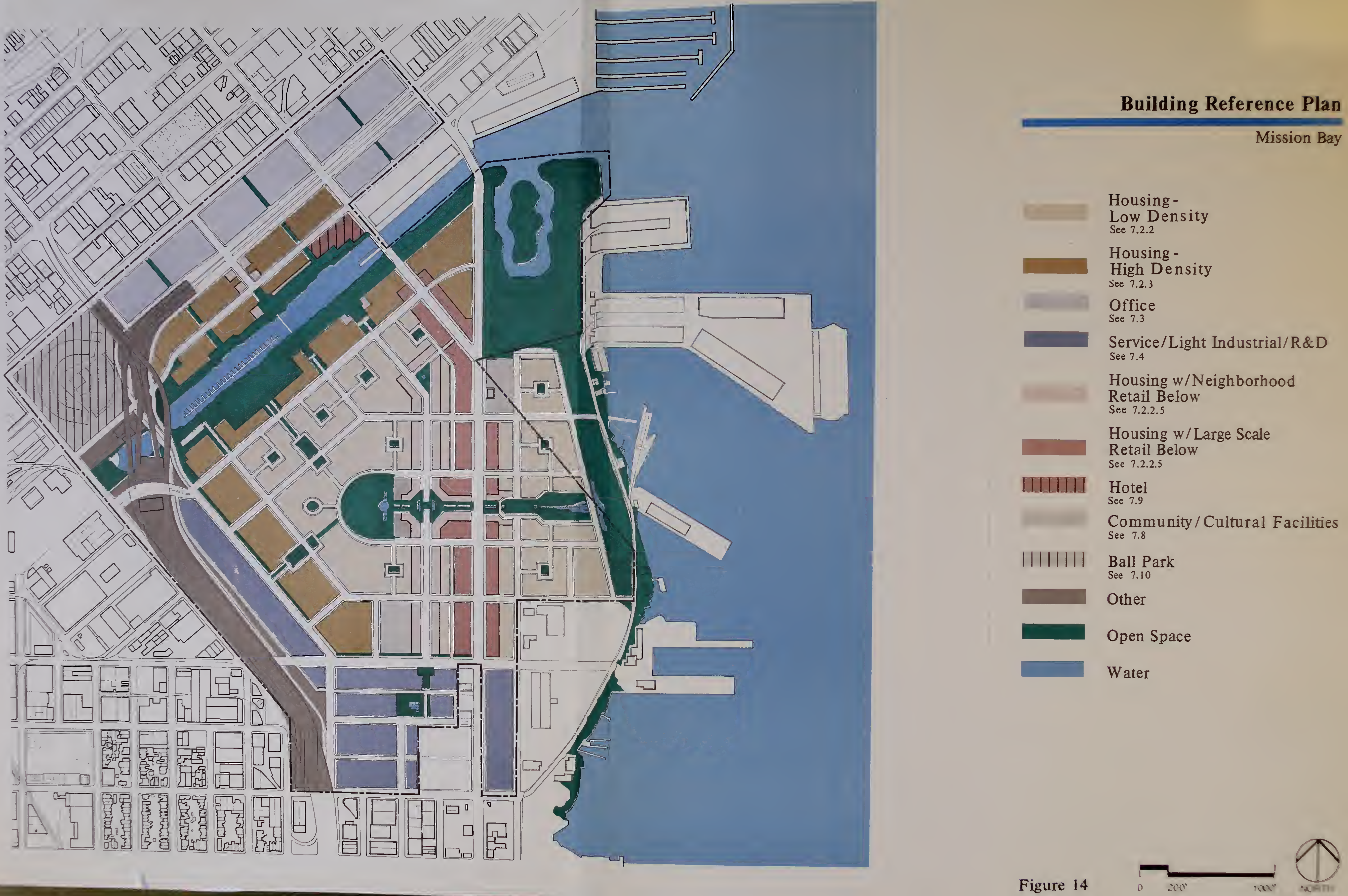

Housing - Low Density See 7.2.2
Housing - High Density See 7.2.3
Office See 7.3
Service/Light Industrial/R&D See 7.4
Housing w/Neighborhood Retail Below See 7.2.2.5
Housing w/Large Scale Retail Below See 7.2.2.5
Hotel See 7.9
Community/Cultural Facilities See 7.8
Ball Park See 7.10
Other
Open Space
Water
0
200'
1000'
NORTH

Figure 14

Housing Zones Reference Plan

Mission Bay

3-4 Zone Number

110 Number of Housing Units

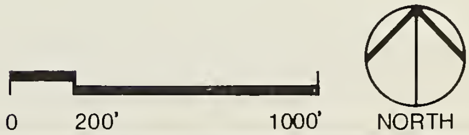
		Units per Acre
Zone 1	Townhouses (does not occur on an entire block)	25-50
Zone 2	Three Story Walk-ups	75-85
Zone 3	Mixed Three Story and Four Story	75-85
Zone 4	Neighborhood Commercial/ Three Story Walk-ups	65
Zone 5	One Level Podium Mid-Rise	90-110+
Zone 6	Two Level Podium Mid-Rise	150+
Zone 7	The Crescent	90-110

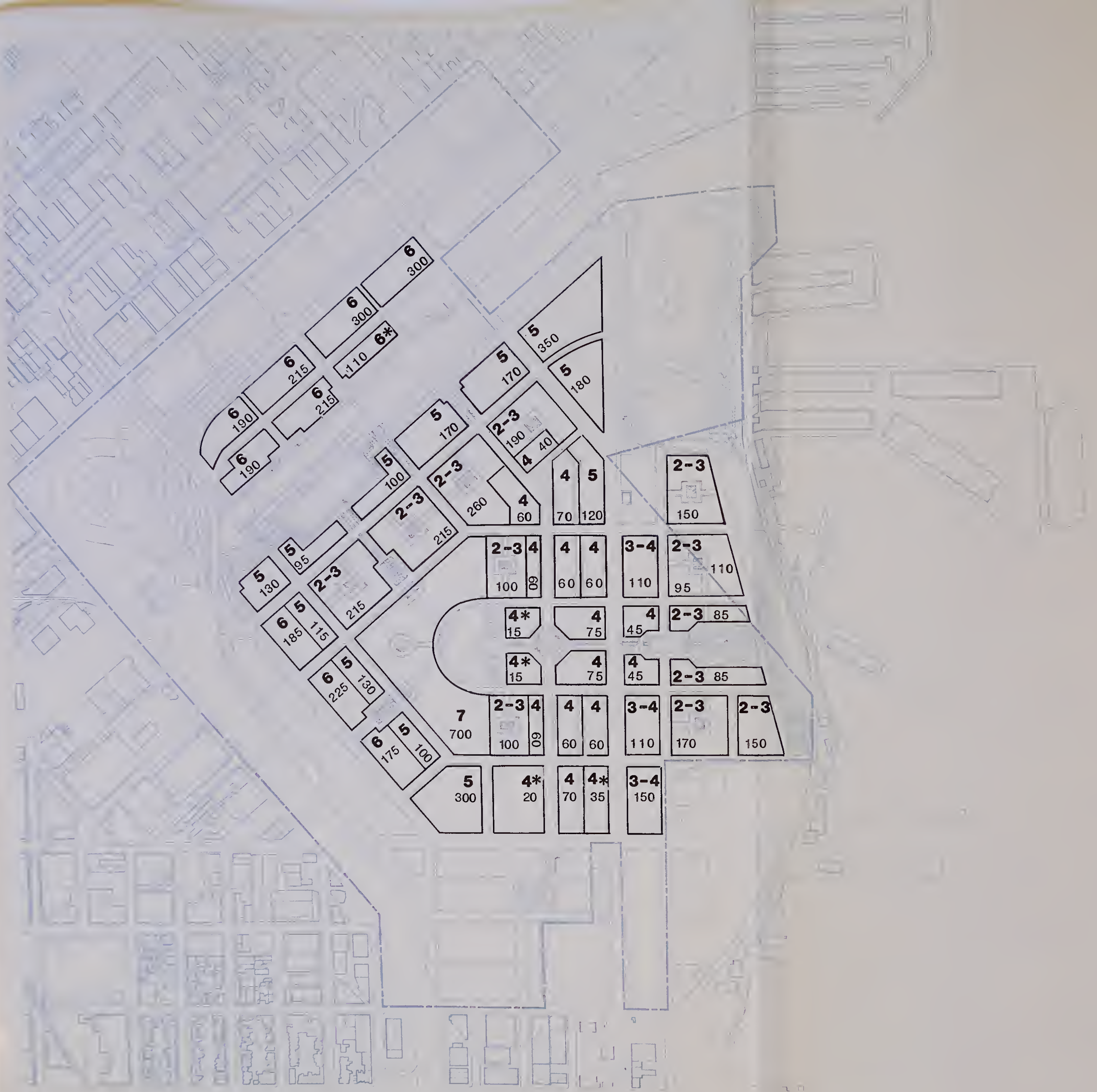
Note: See 7.2 for Housing Zones Design Guidelines

Zone 4* are special conditions. See 7.8.3 and 7.6.3

Zone 6* is a special condition. See 7.9.3

Figure 15





6 300
6 300
110 6*
6 215
6 215
6 190
6 190
5 350
5 180
5 170
5 170
2-3 190
4 40
5 100
2-3 260
4 60
4 70
5 120
2-3 150
2-3 215
5 95
5 130
2-3 215
6 185
5 115
2-3 100
4 60
4 60
4 60
3-4 110
2-3 95
110
4* 15
4 75
4 45
2-3 85
4* 15
4 75
4 45
2-3 85
6 225
5 130
7 700
2-3 100
4 60
4 60
4 60
3-4 110
2-3 170
2-3 150
6 175
5 100
5 300
4* 20
4 70
4* 35
3-4 150

Housing Zones Reference Plan

Mission Bay

3-4 Zone Number

110 Number of Housing Units

		Units per Acre
Zone 1	Townhouses (does not occur on an entire block)	25-50
Zone 2	Three Story Walk-ups	75-85
Zone 3	Mixed Three Story and Four Story	75-85
Zone 4	Neighborhood Commercial/ Three Story Walk-ups	65
Zone 5	One Level Podium Mid-Rise	90-110+
Zone 6	Two Level Podium Mid-Rise	150+
Zone 7	The Crescent	90-110

Note: See 7.2 for Housing Zones Design Guideline

Zone 4* are special conditions. See 7.8.3 and 7.6.3

Zone 6* is a special condition. See 7.9.3

Figure 15

0
200'
1000'
NORTH

SIXTH STREET
SEVENTH STREET

Right-of-Way and Street Reference Plan

Mission Bay

▒▒▒▒▒ 35' Right-of-Way Lane

·········· 40' Right-of-Way Service Alley

░░░░░ Pedestrian Right-of-Way Lane

🟩 Illustrative Minipark - not part of Right of Way

See 7.12.3 Street Guidelines for Street Sections

BERRY STREET - 70'
CHANNEL STREET - 72'
CRESCENT LANE - 35'
FIFTH STREET - 82.5'
FOURTH STREET - 82.5'
ILLINOIS STREET - 62'
INDIANA STREET - 62'
KING STREET - 150'
LONG BRIDGE STREET - 80'
MARIPOSA STREET - 62'
MINNESOTA STREET - 72'
MISSION BAY STREET - 56'
MISSION CREEK STREET - 62'
MISSION ROCK STREET - 62'
OWENS STREET (a) - 102'
OWENS STREET (b) - 86'
PARK CRESCENT - 62'
MICHIGAN STREET - 62'
SEVENTEENTH STREET - 72'
SIXTEENTH STREET - 110'
SIXTH STREET - 62'
THIRD STREET (a) - 110'
THIRD STREET (b) 100'
TOWNSEND STREET - 82.5'

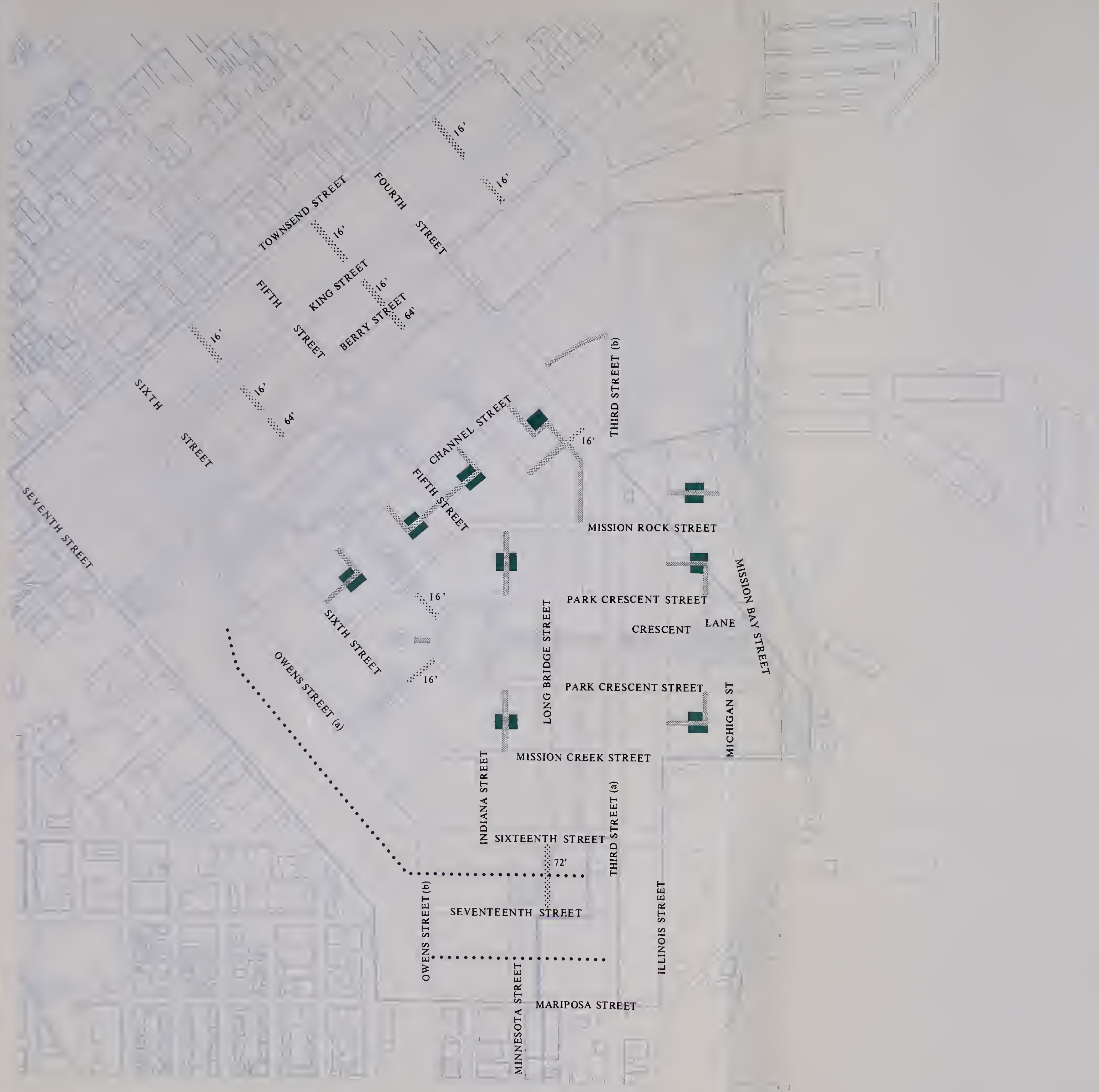
Notes: The Proposed Street Names are for Planning Purposes Only.

See Section 5 for circulation descriptions.

Design guidelines are in addition to Department of Public Works standards. All Rights of Way are sufficient for underground utilities and emergency vehicle access.

Figure 16

0
200'
1000'
NORTH


TOWNSEND STREET
FOURTH STREET
16'
16'
16'
KING STREET
16'
BERRY STREET
64'
FIFTH STREET
16'
SIXTH STREET
16'
64'
SEVENTH STREET
CHANNEL STREET
THIRD STREET (b)
16'
FIFTH STREET
MISSION ROCK STREET
16'
PARK CRESCENT STREET
CRESCENT LANE
MISSION BAY STREET
SIXTH STREET
16'
OWENS STREET (a)
PARK CRESCENT STREET
LONG BRIDGE STREET
MICHIGAN ST
MISSION CREEK STREET
INDIANA STREET
SIXTEENTH STREET
THIRD STREET (a)
72'
OWENS STREET (b)
SEVENTEENTH STREET
ILLINOIS STREET
MINNESOTA STREET
MARIPOSA STREET
0 200' 1000'
NORTH

Right-of-Way and Street Reference Plan

Mission Bay

▨ 35′ Right-of-Way Lane

·········· 40′ Right-of-Way Service Alley

▨ Pedestrian Right-of-Way Lane

■ Illustrative Minipark - not part of Right of Way

See 7.12.3 Street Guidelines for Street Sections

BERRY STREET - 70'
CHANNEL STREET - 72'
CRESCENT LANE - 35'
FIFTH STREET - 82.5'
FOURTH STREET - 82.5'
ILLINOIS STREET - 62'
INDIANA STREET - 62'
KING STREET - 150'
LONG BRIDGE STREET - 80'
MARIPOSA STREET - 62'
MINNESOTA STREET - 72'
MISSION BAY STREET - 56'
MISSION CREEK STREET - 62'
MISSION ROCK STREET - 62'
OWENS STREET (a) - 102'
OWENS STREET (b) - 86'
PARK CRESCENT - 62'
MICHIGAN STREET - 62'
SEVENTEENTH STREET - 72'
SIXTEENTH STREET - 110'
SIXTH STREET - 62'
THIRD STREET (a) - 110'
THIRD STREET (b) 100'
TOWNSEND STREET - 82.5'

Notes: The Proposed Street Names are for Planning Purposes Only

See Section 5 for circulation descriptions.

Design guidelines are in addition to Department of Public Works standards. All Rights of Way are sufficient for underground utilities and emergency vehicle access.

Figure 16

FIFTH STREET
SEVENTH STREET

Open Space Reference Plan

Mission Bay

1 Crescent Park
See 7.11.6

2 Long Bridge Plaza
See 7.11.5.1

3 Fountain Park
See 7.11.5.2

4 Mission Bay Green
See 7.11.4

5 Mission Bay Athletic Fields
See 7.11.3.3

6 Wetlands Habitat
See 7.11.3.1

7 Mission Point Park
See 7.11.3.2

8a Channel Plaza (North & South)
See 7.11.2

8b Channel Green
See 7.11.2.3

9 Triangle Plaza
See 7.11.7

10 Minnesota Park
See 7.11.8

11 Park North
See 7.11.9

12 Park South
See 7.11.9

P Playground (4)
See 7.11.9

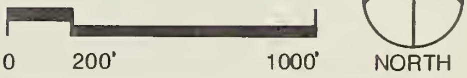
T Tot Lot (13)
See 7.11.9

M Mini Park
See 7.11.9

J Jogging Trail
See 7.11.10

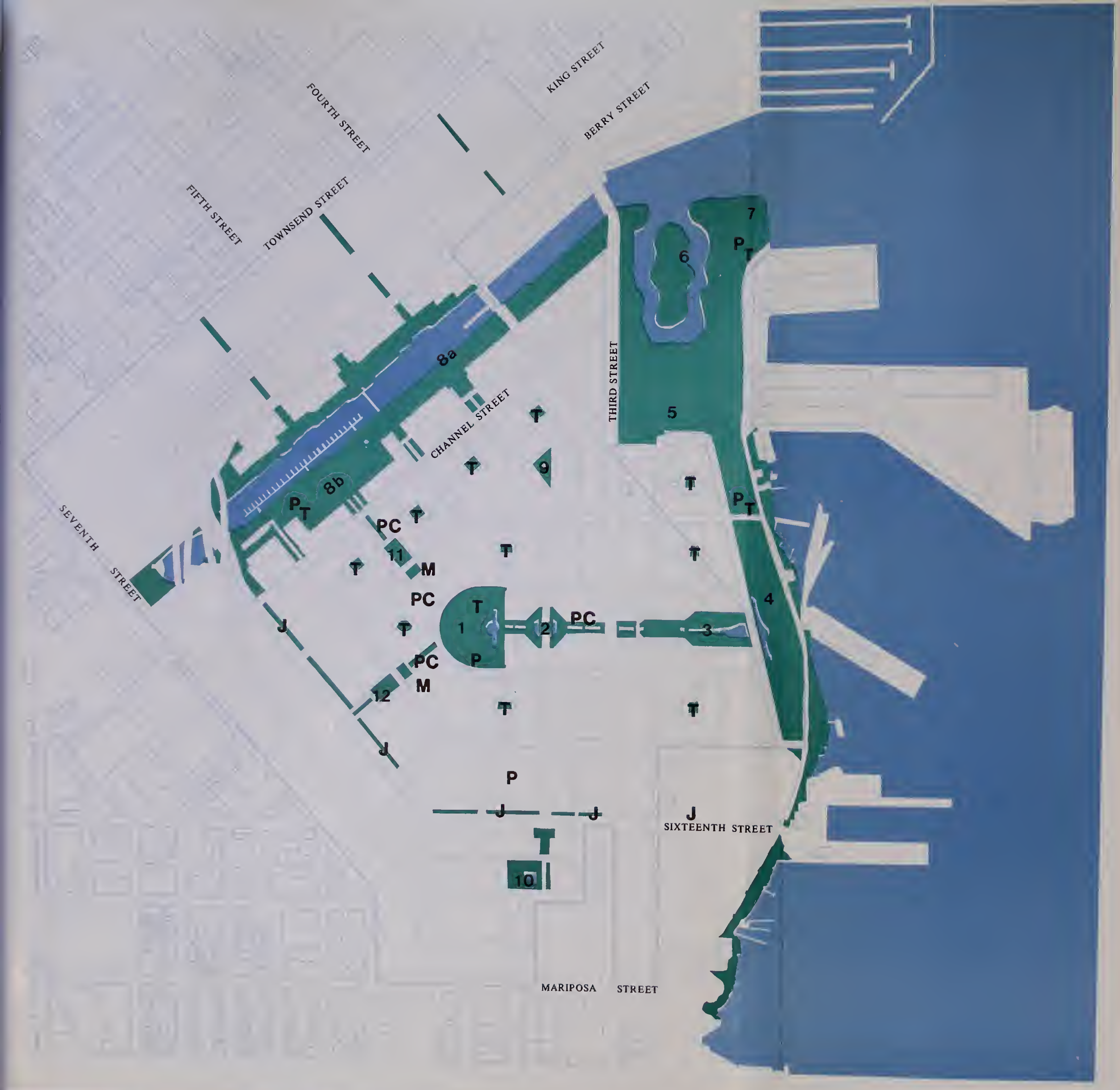
PC Pedestrian Corridor
See 7.11.11

Figure 17



Open Space Reference Plan

Mission Bay


KING STREET
BERRY STREET
FOURTH STREET
FIFTH STREET
TOWNSEND STREET
CHANNEL STREET
THIRD STREET
SEVENTH STREET
SIXTEENTH STREET
MARIPOSA STREET
1
2
3
4
5
6
7
8a
8b
9
10
11
12
P
T
M
J
PC

1	Crescent Park	See 7.11.6
2	Long Bridge Plaza	See 7.11.5.1
3	Fountain Park	See 7.11.5.2
4	Mission Bay Green	See 7.11.4
5	Mission Bay Athletic Fields	See 7.11.3.3
6	Wetlands Habitat	See 7.11.3.1
7	Mission Point Park	See 7.11.3.2
8a	Channel Plaza (North & South)	See 7.11.2
8b	Channel Green	See 7.11.2.3
9	Triangle Plaza	See 7.11.7
10	Minnesota Park	See 7.11.8
11	Park North	See 7.11.9
12	Park South	See 7.11.9
P	Playground (4)	See 7.11.9
T	Tot Lot (13)	See 7.11.9
M	Mini Park	See 7.11.9
J	Jogging Trail	See 7.11.10
PC	Pedestrian Corridor	See 7.11.11

Figure 17

0 200' 1000' NORTH

Building Special Elements

Mission Bay

——·— Visual Axis

1 North channel building edge
See 7.2.4.2

2 South channel building edge
See 7.2.4.3

3 Public safety and recreational building complex
See 7.8.3.2

4 Crescent building
See 7.2.4.1

5 Theater and library
Community and cultural facilities building complex
See 7.8.3.1

6 Light industrial building facade west of Owens
See 7.4.3.1

7 Light industrial building facade south of 16th Street
See 7.4.3.2

8 School
See 7.8.3.3

9 Light industrial park
See 7.4.3.3

10 Bay edge building facade
See 7.2.4.4

11 Housing facade visual terminus
See 7.2.4.5

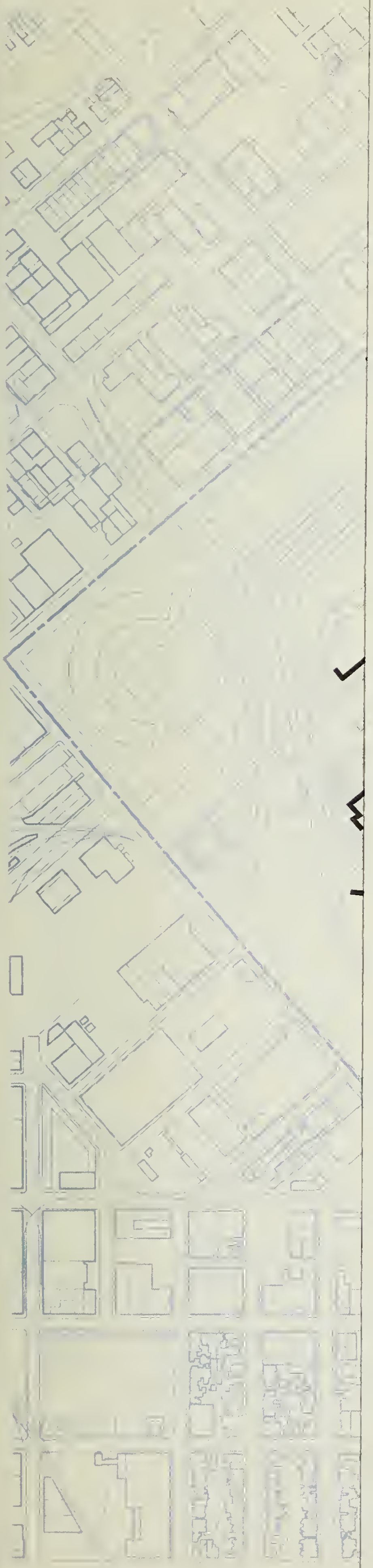
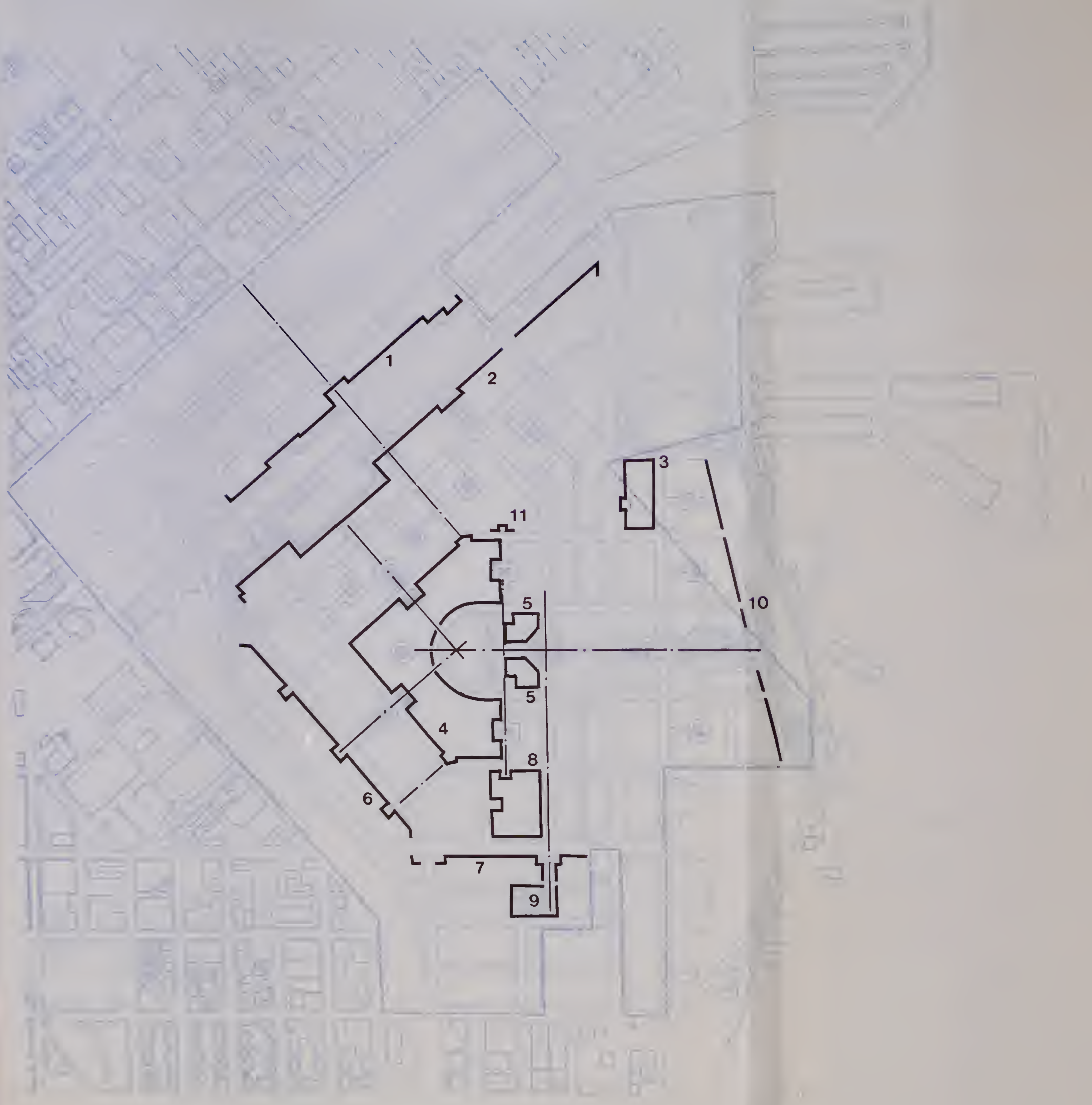


Figure 18

Building Special Elements

Mission Bay



—·— Visual Axis

1 North channel building edge
See 7.2.4.2

2 South channel building edge
See 7.2.4.3

3 Public safety and recreational building complex
See 7.8.3.2

4 Crescent building
See 7.2.4.1

5 Theater and library
Community and cultural facilities building complex
See 7.8.3.1

6 Light industrial building facade west of Owens
See 7.4.3.1

7 Light industrial building facade south of 16th Street
See 7.4.3.2

8 School
See 7.8.3.3

9 Light industrial park
See 7.4.3.3

10 Bay edge building facade
See 7.2.4.4

11 Housing facade visual terminus
See 7.2.4.5

Figure 18

7.2 HOUSING

7.2.1 General Intent

The design guidelines which follow have many of the same objectives as the sections of the San Francisco City Planning Code which address the design of housing. The objectives are: (1) to establish appropriate residential densities for particular places; (2) to ensure livable dwellings with adequate light, air and open space and; (3) to perpetuate the special qualities of urbanism that characterize San Francisco's historic neighborhoods. The guidelines which follow differ from the corresponding sections of the San Francisco Planning Code, however, because the conditions under which housing will be built at Mission Bay differ from those in other parts of the City in significant ways.

San Francisco residential fabric

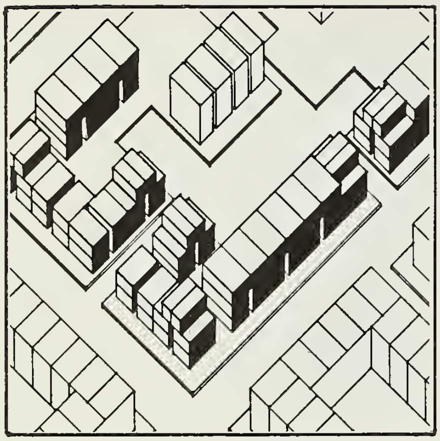
Much of the character of San Francisco neighborhoods is produced by the combination of small lots and hills, neither of which are present in Mission Bay. The San Francisco Planning Code deals with the relationship of new housing to the patterns of building and open space of older neighbors. In Mission Bay all of the housing will be new and there are no existing patterns to protect. Traditional San Francisco neighborhoods are the record of individual ownership or speculative development on a very small scale. It is likely that most of the housing in Mission Bay will be built by large developers and that typical increments of construction, at least in the early phases, will be 200 to 500 units.

Mid-block court

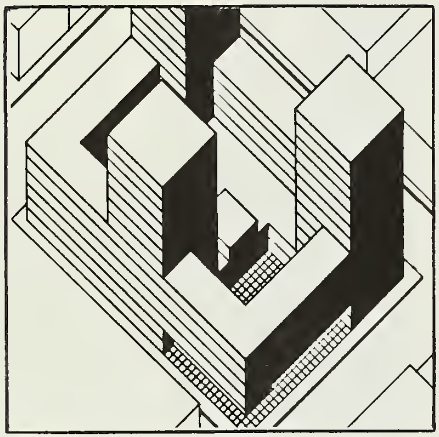
Developers of large housing projects on raw, empty land have a natural tendency to seek to control their own environment, to turn projects inward and to attempt to buffer them from their surroundings. This impulse is exactly contrary to the objectives of creating over time, a street oriented, cohesive, urban neighborhood in Mission Bay. The design guidelines which follow recognize the need to provide security, both actual and perceived. The patterns which the guidelines promote do so within the context of a true urban fabric, and discourage the creation of independent and isolated Planned Developments.

Walled enclave

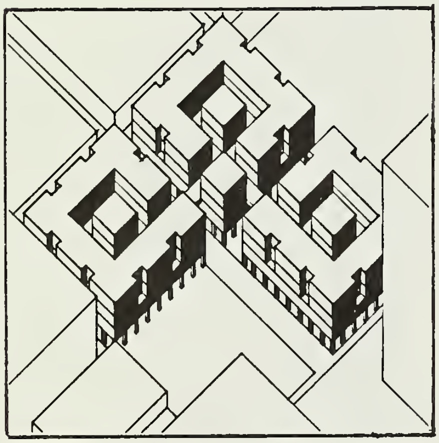
An important element of the urban design for Mission Bay is the massing of the housing i.e. the determination of where buildings are high, where they are low and where open space occurs. Generally massing across the site is not addressed in the design guidelines themselves, but in the accompanying height map, open space plan and streets plan.



San Francisco existing low- rise



San Francisco existing mid-rise



San Francisco existing mixed-use

The housing design guidelines are organized in the following sections corresponding to sub-areas or zoning classifications:

Low-Rise Residential Blocks	
General Intent and Guidelines	
Zone 1	Townhouse Blocks
Zone 2	3-Story Walk-Up Blocks
Zone 3	Combined 3- & 4-Story Blocks
Zone 4	Mixed Use Neighborhood Commercial/Housing Blocks
Mid-Rise Residential Blocks	
General Intent and Guidelines	
Zone 5	One Level Podium - Moderate Density
Zone 6	Two Level Podium - High Density
Building Special Elements	
Zone 7	The Crescent
No.2	North Edge of Channel
No.3	South Edge of Channel
No.4	Bay Edge along Mission Bay Street
No.5	Block No. 21 along Mission Rock Street

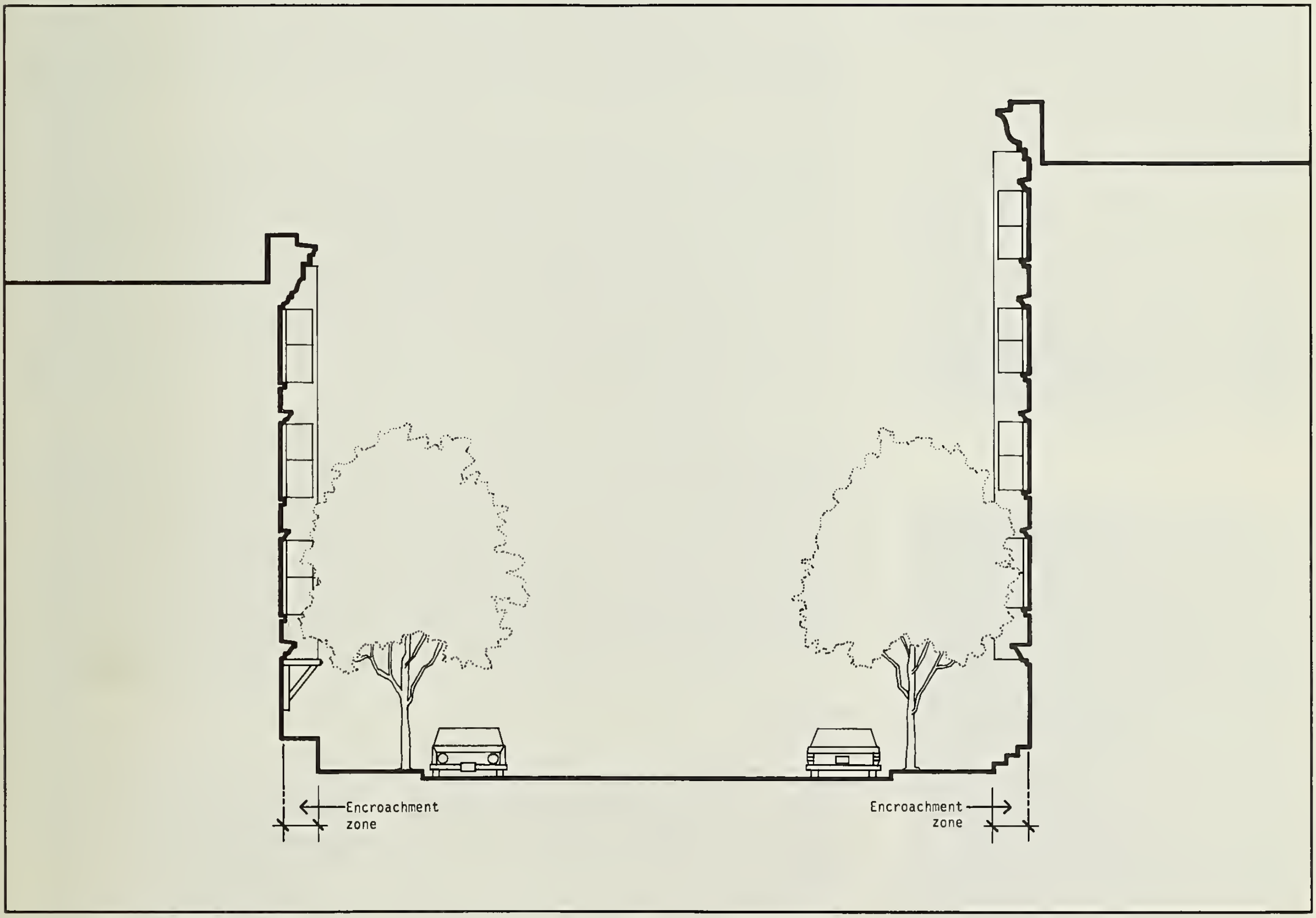
Some zones refer to areas of continuous residential fabric; others to focal points within the plan with specific design prescriptions. Each part begins with general guidelines which apply to each classification within that part. Each classification begins with a statement of intent which provides a rationale for the guidelines, gives guidance to architects and developers, and serves as a basis for project review. And finally, there are mandatory requirements which should become a part of the San Francisco Planning Code and/or the development agreement between the project sponsor and the City.

The design controls for Mission Bay are tailored to large aggregations of housing, frequently located on parking podiums. The controls, therefore, establish standards for building separations, rather than rear yard or lot coverage prescriptions.

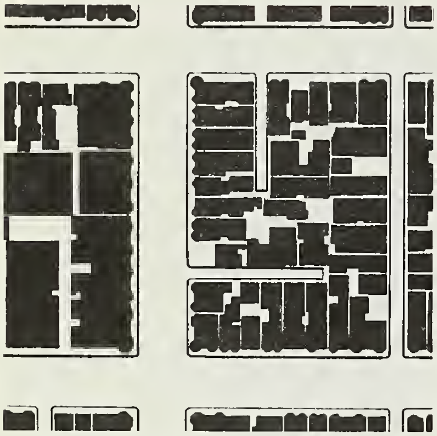
One means of achieving animation of streetscapes and embellishment of the base of buildings is to encourage projection of various building elements onto sidewalks in ways that were characteristic of older San Francisco buildings but have vanished in recent years for a variety of legal and practical reasons. The Sidewalk Encroachment Zone created as a part of these guidelines will ensure a reappearance of these attractive and once-typical decorative elements and are illustrated on this page.

Existing sidewalk encroachments

Some of the qualitative elements of project design cannot be fully addressed by fixed guidelines. Even with complete adherence to all applicable guidelines, approval of a project by the City may not be ensured. Other issues to be addressed on a case by case basis include: trash disposal including recycling, mail service and utility meter accessibility. The housing prototypes for Mission Bay should serve as illustrations of ways to achieve the intent of the guidelines at various densities. Guidelines which appear on control maps include program by block, use districts, and building heights. The plan illustrates housing zones and number of units per block assumed to meet the overall program. The illustrative plan is compatible with the use districts, building heights and building program described elsewhere.



Encroachment Zone



Ground plan - North Beach

Marina streetscape

Mid-block lane

7.2.2 Lowrise Residential Blocks

7.2.2.1 General Intent and Guidelines

One of the principal elements of the Mission Bay Plan is an extensive low-rise residential neighborhood based on the precedent of traditional San Francisco neighborhoods such as North Beach and the Marina. The design controls presented here are adapted from these existing neighborhoods but acknowledge the special conditions of Mission Bay. The low-rise blocks, streets, mid-block lanes, and mini-parks are modeled on sucessful examples in older San Francisco neighborhoods. The design controls for the low-rise buildings are intended to ensure that small scale buildings will be oriented toward an armature of public space, which consist of streets, mid-block lanes, and parks, and will shape its edges and will populate it with life. While security is an important issue which the guidelines address, the intent is to discourage inward oriented, secured compounds. A cohesive neighborhood, with lively streets, not insular enclaves of housing, is the goal.

The character of older neighborhoods in San Francisco is established by the City's original subdivision into 25-foot wide lots, corresponding to the width of a typical house or apartment. The low-rise housing prototypes for Mission Bay are based on the same planning module to impart San Francisco's characteristic scale to the Mission Bay neighborhood. Because Mission Bay is flat and because housing will not be built a single lot at a time, the Mission Bay Design Guidelines contain special provisions to ensure the 25-foot increment of building articulation along the street.

As shown by the housing and block prototypes low-rise blocks will permit an intimate scale of mid-block lanes and mini-parks and provide up to six development parcels per typical block. To provide architectural diversity there should be individual developers for these parcels. Whole block developments could be permitted but they must conform to the requirements for mid-block lanes and mini-parks and variety in facade treatment.

Setbacks:

The prevailing pattern of residential building frontages should be continuous at the back of sidewalks on both streets and mid-block lanes, except where specifically designated otherwise by the Mission Bay Plan.

Bay windows

Street Trees:

Streets and mid-block lanes should have street trees in accordance with the Mission Bay Street Plan. Where individual lots occur, one street tree for each lot is required.

Solar Orientation:

As a general practice, buildings should be oriented so that a majority of primary living spaces receive direct sunlight. No dwelling unit may have only a north orientation. Units in which the orientation is within 10 degrees of north must have at least one additional exposure for at least 15% of its perimeter.

Bay Windows:

Housing in Mission Bay should employ the provisions for bay windows outlined in the San Francisco City Planning Code. The following additional bay window projections should be permitted in Mission Bay: (1) corner bays projecting up to 3 feet from the wall plane at streets and 2 1/2 feet from the wall plane at mid-block lanes no more than 15 feet in length and totaling no more than 40 square feet; (2) bays at the edges of buildings or party walls with a minimum separation of 4 feet at the outerface of the bays; (3) projecting cornices linking bays, particularly where used to establish 25-foot building articulations. Grade to underside of overhanging bays should be reduced from 10 feet to 7 1/2 feet.

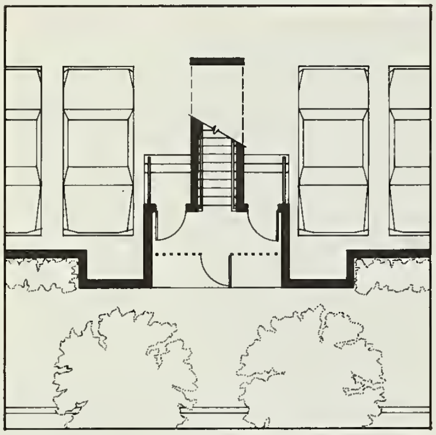
Base Height:

It is desirable to reduce the base height of buildings by depressing parking areas. However, soils conditions in Mission Bay may require long span framing systems with greater than normal structural depths, in order to minimize the number of required pilings. As a general rule, the ground level parking areas should be depressed within the limits of the existing water table. The first residential level should be no more than 8 1/2 feet above grade. Townhouses and other small parcel developments would be exempt from this rule.

Bay window

Building Base:

Decorative treatment at the base of buildings is desirable. Dark colored or impervious materials, particularly around garage door openings, are appropriate to protect the base of buildings from soil and damage. Generally, embellishments or articulations of the principal facade material are preferable to changes of material at the base.



Typical secured walk-up entry

Where parking occurs at the base of a building along a street or mid-block lane frontage there should be planted niches, or planter boxes with irrigation provided for not less than 50% of the parking frontage. Openings to parking areas for light and ventilation should be provided with grills that are sufficiently opaque to block the view of parked cars from the street.

Security/Access:

Secured routes from parking to units are desirable. Garages should be secured from unwarranted entry. For low-rise walk-ups the entry stairs should also serve as the access from parking to units; as illustrated to the left.

Podium Surface Use:

All of the surface of any podium should be either building footprint, pedestrian circulation, landscaping or other forms of common usable open space. Unembellished surfaces are not permitted.

Off-Street Parking:

Each dwelling unit should have one parking space allocated for its use with the exception of elderly housing. Individual houses should have covered resident parking within the individual lot with private access. Cluster units should have covered resident parking within the parcel boundary with shared access. Units over a garage podium should have resident parking within an aggregated parking garage with common access.

Curb Cut:

In order to minimize the impact of automobiles, no curb cut or garage door facing the street or mid-block lane should be wider than 12 feet. Without compromising the accessibility of the units, curb cuts should be spaced and arranged to maximize on-street parking, minimize sidewalk interruptions, and allow opportunity for ground level landscaping. Garage doors should be centered on or placed in relationship to bay windows above and be opaque.

On-Street Parking:

As is commonplace in most San Francisco neighborhoods, on-street parking should serve as additional resident parking and guest parking. Parking spaces should be located adjacent to the sidewalks and along the streets designated by the Mission Bay Street Map.

Open Space:

Residents should have access to usable open space whether common or private in the quantities stated in each specific zone. Usable open space should be as defined in Section 135 of the San Francisco City Planning Code.

Light In Corridors:

Double loaded corridors more than 25 feet long should have daylight from windows or skylights equal in area to 10% of the floor area.

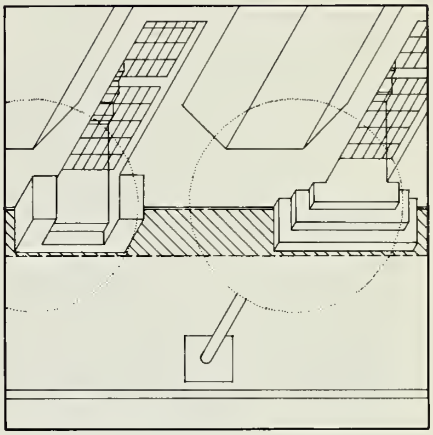
Roofs:

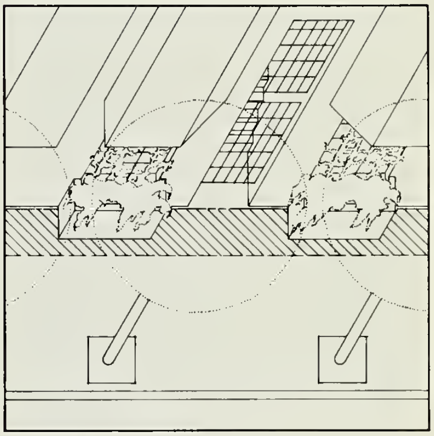
Because Mission Bay will be looked upon by Potrero Hill residents, roofs should be non-reflective, low intensity colors. Roof top mechanical equipment should be grouped together and screened from view. Enclosures for mechanical equipment should be an integral part of the building design. Existing height exceptions should be modified to allow more building volume for enclosure and screening of equipment.

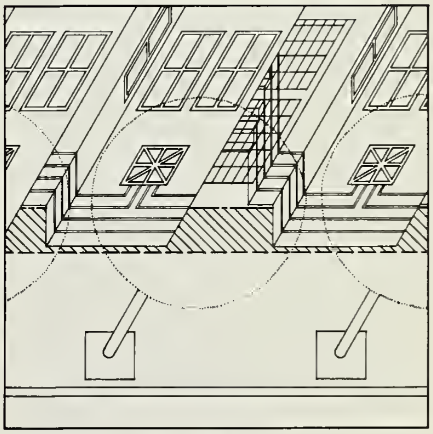
Sidewalk Encroachments:

Intrusions of architectural projections and landscaped areas into the sidewalk areas are encouraged. To facilitate these intrusions there should be an encroachment zone along streets of up to 4 feet and along mid-block lanes is 1 foot. The encroachment zone would be private property but should be treated as a public sidewalk extension to the extent it is not occupied by permitted encroachments as illustrated to the right. Among the options for low-rise blocks are: Stairs and stoops with a 4-foot minimum encroachment and planter boxes, bay or bow windows, and 3-foot maximum width columns all with a 3-foot maximum encroachment.

In every 25 feet of building frontage at least 67% of linear footage of the encroachment zone should remain unobstructed by the foregoing encroachments, except where a staircase to a second level dwelling unit entry runs laterally across the face of the building. Projections such as sills, door frames, belt courses, and rusticated materials should be provided and are permitted to project up to 6 inches over the sidewalk without limitation. Where garage doors occur, sloping driveways should be protected by handrails or planters (and are considered part of unobstructed area).

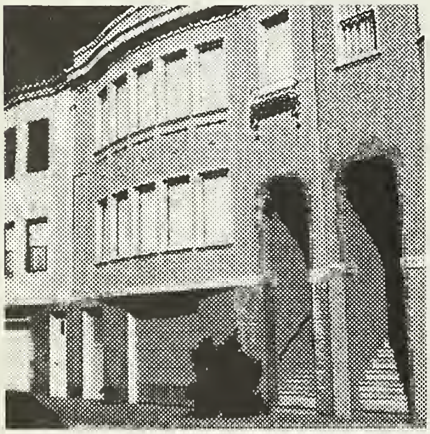

Stairs and stoops


Planter boxes


Bay or bow windows

Traditional row houses

Clustered townhouses



Marina row house

7.2.2.2 Zone 1: Townhouses

Intent:

Individual and clustered townhouse units constitute a small but vital element of the residential fabric of Mission Bay. They perform an important role in establishing neighborhood character in addition to serving a segment of the housing market. Individual houses and their entrances should be oriented toward streets. The housing prototypes illustrated in the September 1986 Mission Bay Housing Report, pages 5-8, show two types of townhouses that can be accommodated in Zone 1, some with individual parking and open space, some clustered around courtyards with aggregated parking and open space. In either case, units on the street should have their principal entrance from the street. The combination of entrances each 25 to 50 feet and building articulations each 25 feet will help Mission Bay townhouses to achieve the character of traditional San Francisco row-houses. Potential locations are along mid-block lanes, around mini-parks and on top of parking podiums.

Guidelines:

Density:

Permitted densities in Zone 1 should be a minimum of 25 du/ac and a maximum of 50 du/ac. Areas used for density calculations include the following: private rear yard, common courtyard, and mid-block lane in the acreage.

Lot Coverage:

For individual or clustered units, 75% lot coverage should be the maximum permitted at ground level. Permitted uses at the ground level are living space, parking, building entrances, storage, and mechanical facilities. Above the ground level the maximum permitted lot coverage should be 75%.

Height:

The maximum building height should be 35 feet.

Entrance Frequency:

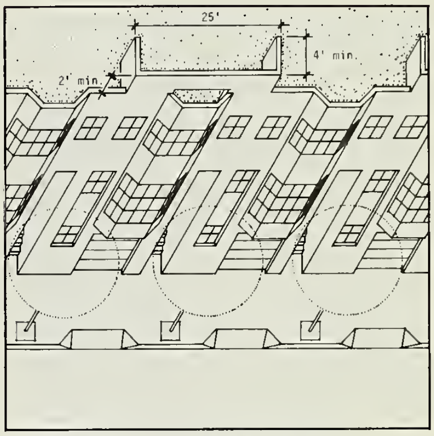
As a prevailing pattern there should be an individual entrance each 25 feet or shared entrances each 50 feet along streets, mid-block lanes and for units whose primary entrances are from courtyards.

Building Articulation:

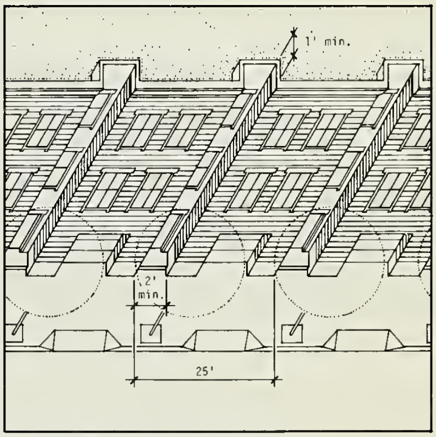
There are several means of creating the 25-foot modulation which is typical of row house streets in San Francisco and some are illustrated to the right. There are a variety of ways of combining these devices to achieve the intent described below.

1) Changes in parapet height a minimum of 2 feet each 25-foot of building width with perpendicular returns of not less than 4 feet in order to avoid the appearance of applied false fronts.
2) Changes in wall plane not less than 1 foot in depth and not less than 2 feet in width each 25-foot of building width for the full height of the building.
3) Bay windows linked with cornices to form 15 to 30-foot articulations.
4) Changes in color or material and fenestration each 25-foot of building width.

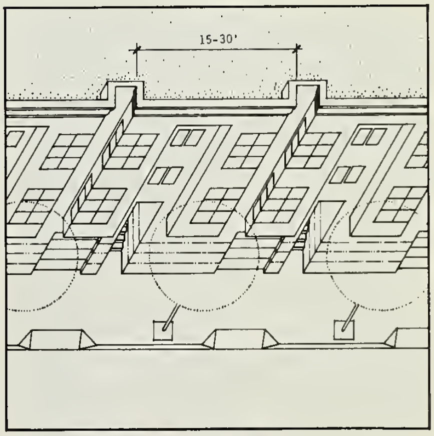
Townhouses should incorporate at least two of the above.



Change in parapet height



Change in wall plane



Linked bay windows

Open Space:

Each townhouse should have 300 square feet of private or 400 square feet of common usable open space.

Building Separation:

Adjacent buildings should be separated to ensure privacy, a reasonable view and light for inner rooms. The minimum separations between building faces are as follows:

front to front	30 feet
front to rear	25 feet
rear to rear	20 feet
front to side	25 feet
rear to side	15 feet *
side to side	none

* required only if either surface provides required light

3-story walk-up buildings

7.2.2.3 Zone 2: Low-Rise Walk-Up Blocks

Intent:

Blocks of 3-story walk-up units constitute a basic element of the Mission Bay residential fabric and are most reminiscent of traditional San Francisco neighborhoods. The requirements listed below for building articulation, entrance frequency, building bases, bay windows, curb cut, mid-block lanes and mini-parks adapt historic San Francisco housing patterns to contemporary needs for security, automobile use and development of multiple units.

Guidelines:

Density:

Permitted densities in Zone 2 should be a minimum of 75 du/ac and a maximum of 85 du/ac. Exceptions are as follows: the density may be lowered to 55 du/ac if 50% of the units within a project are family units, or 65 du/ac if 20% of the units are family units. Family units are defined as three bedroom units with 300 sq. ft. private open space each unit. Density may be raised to 95 du/ac for housing for the elderly. Density calculations include mid-block lanes in the acreage but exclude public mini-parks.

Lot Coverage:

Not including the mid-block lane and public mini-park, 100% lot coverage should be permitted at the ground level. Permitted uses at the ground level are parking, building entrances, storage and mechanical facilities, and indoor or outdoor common areas. Above the ground level the maximum permitted lot coverage should be 75%, excluding the area of the mid-block lane and mini-park. Decks and balconies which face on the street should be permitted only above the podium and/or within the area allowed by the bay window and sidewalk encroachment guidelines.

3-story walk-up buildings

Height:

The maximum building height should be 45 feet.

Entrance Frequency:

As a prevailing pattern there should be a building entrance at least each 50 feet along streets and mid-block lanes. Housing for the elderly is exempt from this requirement where common areas with street entrances are located at grade.

Building Articulation:

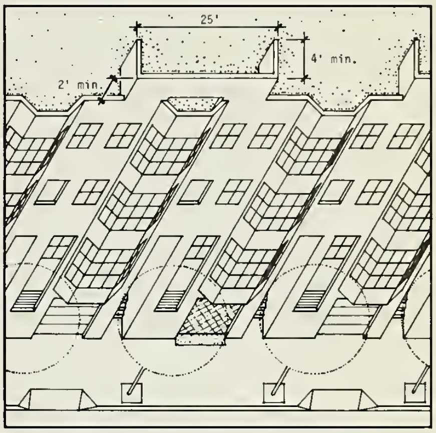
There are several means of creating the 25-foot modulation which is typical of row house streets in San Francisco and some are illustrated to the right. There are a variety of ways of combining these devices to achieve the intent described below. Low-rise walk-ups should incorporate at least two of the following.

1) Changes in parapet height a minimum of 2 feet each 25 feet of building width with perpendicular returns of not less than 4 feet to avoid the appearance of applied false fronts.

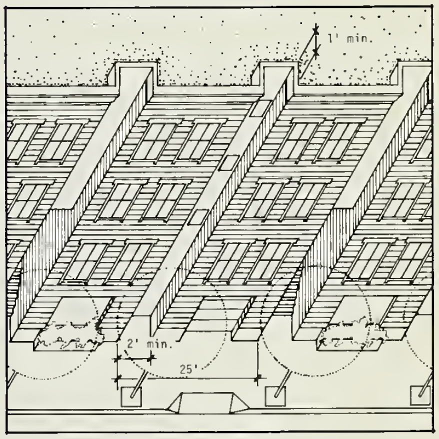
2) Changes in wall plane not less than 1 foot in depth and not less than 2 feet in width each 25 feet of building width for the full height of the building.

3) Bay windows linked with cornices to form 15 to 30-foot articulations.

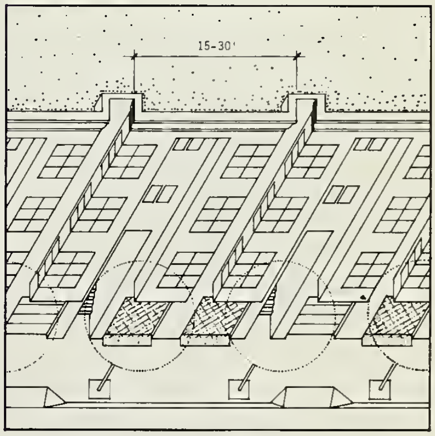
4) Changes in color or material and fenestration each 25 feet of building width.



Change in parapet height



Change in wall plane



Linked bay windows

Open Space:

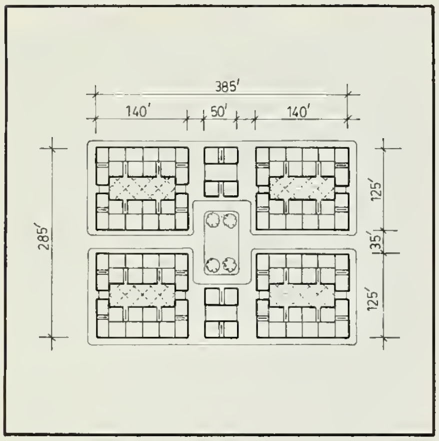
Each unit should have a minimum of 100 square feet of private or 125 square feet of common usable open space. Inner courts located at grade should have a minimum dimension of 50 feet in either horizontal direction with common access to the level above the garage . All usable landscaped areas on the podium above parking may be included in usable open space calculation.

Building Separation:

Adjacent buildings should be separated to ensure privacy, a reasonable view and light for inner rooms. The minimum separations between building faces are as follows:

front to front	30 feet
front to rear	30 feet
rear to rear	30 feet
front to side	25 feet
rear to side	15 feet *
side to side	none

* required only if either surface provides required light.



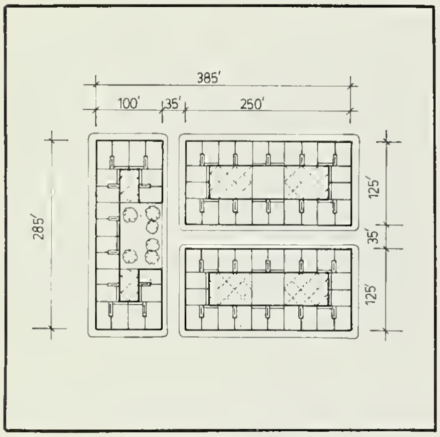
Typical block plan

Mid-block Lanes:

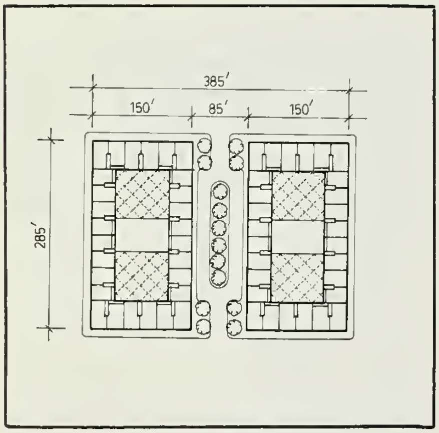
Each block should be bisected by at least one mid-block lane. The lane should be 35 feet building face to building face. On-street parking should be permitted on one side. Illustrations to the left show alternative configurations.

Mini-parks:

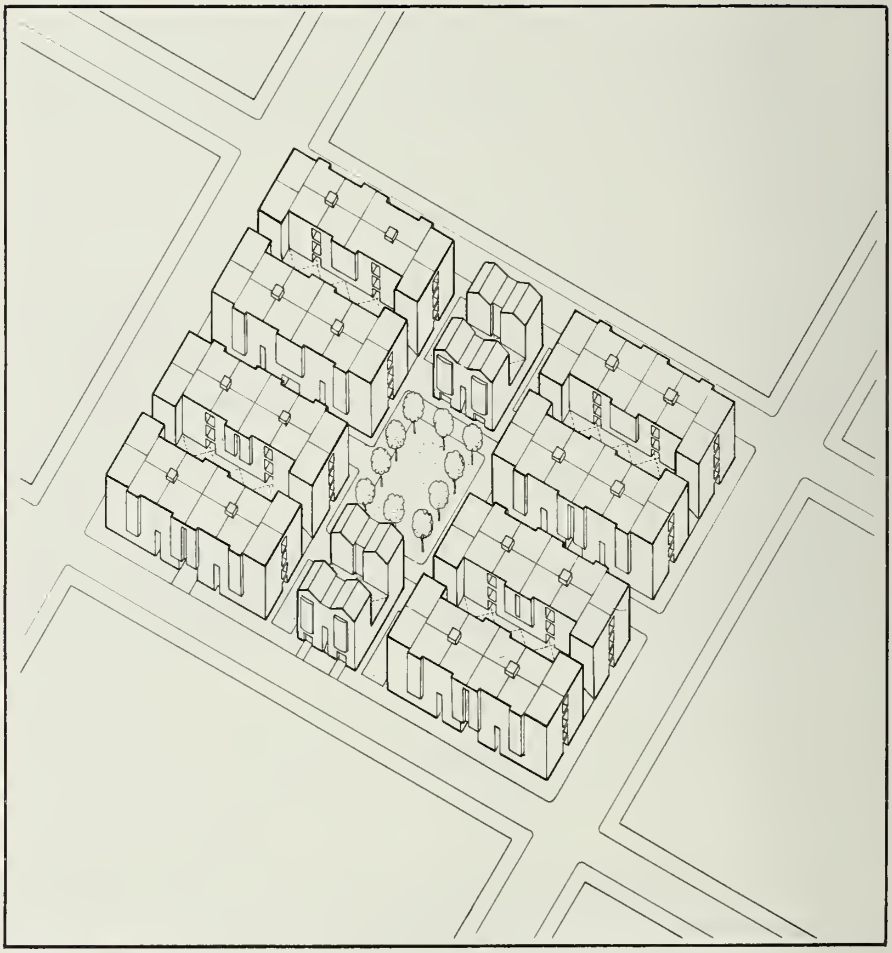
Within each block there should be a public mini-park of not less than .075 acres or 3,300 square feet, except where specifically designated otherwise by the Mission Bay plan. Mini-parks should not be on street frontages, should be accessible by mid-block lanes, and should provide trees and seating.



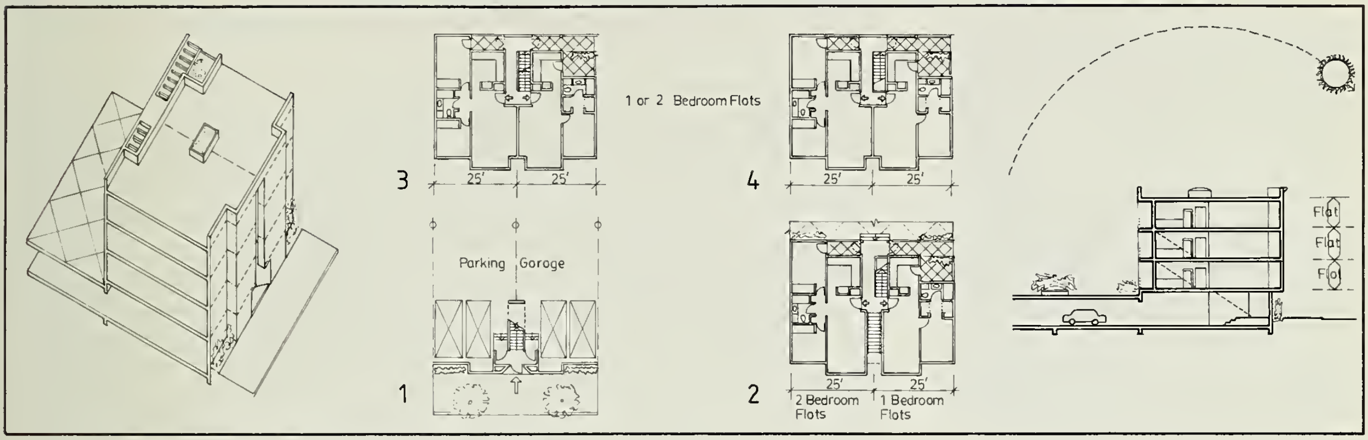
Alternative block plan



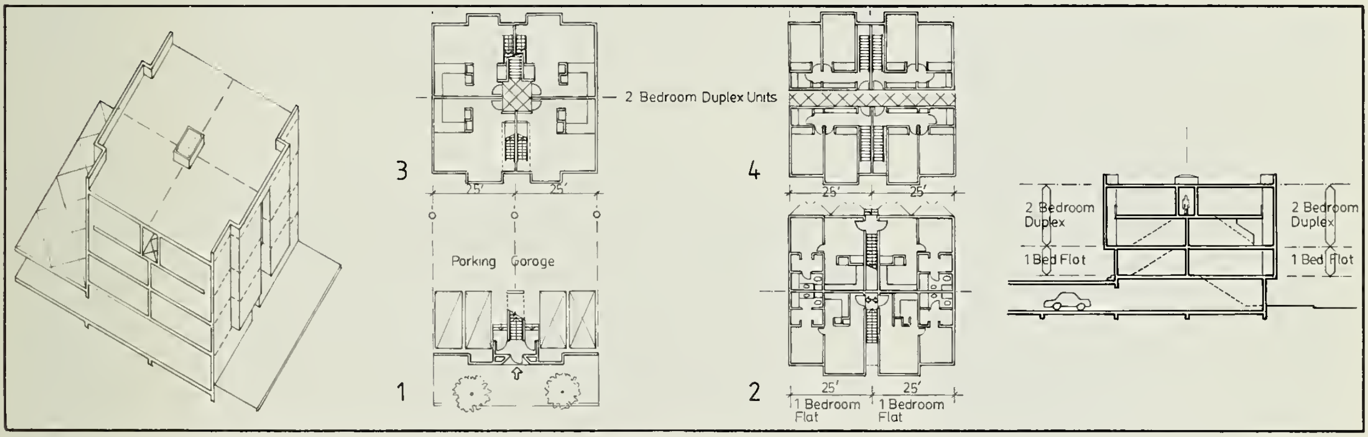
Alternative block plan



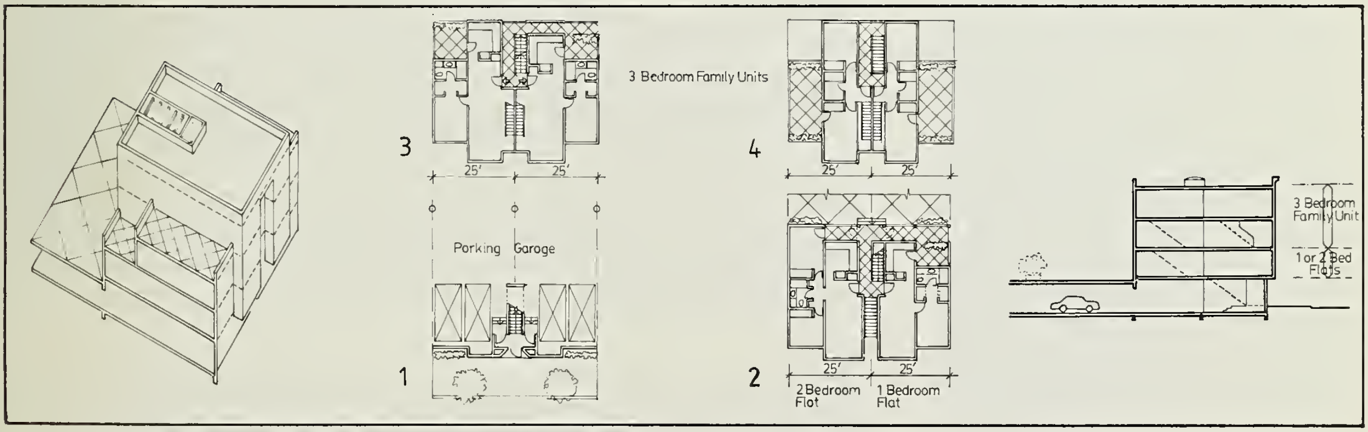
Typical block 3-story walk-up


1 or 2 Bedroom Flats
3
25'
25'
4
25'
25'
Parking
Garage
1
2
25'
25'
2 Bedroom Flats
1 Bedroom Flats
Flat
Flat
Flat

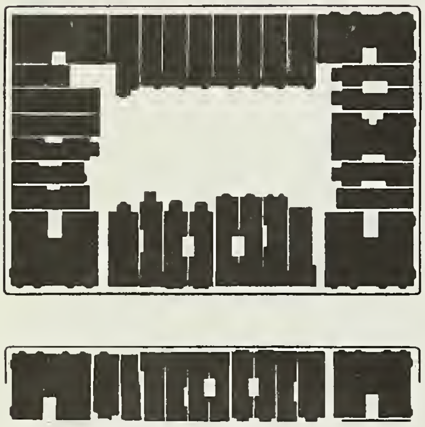
Low-rise walk-up prototype: stacked flats


2 Bedroom Duplex Units
3
25'
25'
4
25'
25'
Parking
Garage
1
2
25'
25'
1 Bedroom Flat
1 Bedroom Flat
2 Bedroom Duplex
1 Bed Flat
2 Bedroom Duplex
1 Bed Flat

Low-rise walk-up prototype: family units over flats


3 Bedroom Family Units
3
25'
25'
4
25'
25'
Parking
Garage
1
2
25'
25'
2 Bedroom Flat
1 Bedroom Flat
3 Bedroom Family Unit
1 or 2 Bed Flats

Low-rise walk-up prototype: duplex units over flats



Ground plan - Marina

7.2.2.4 Zone 3: Mixed 3 and 4-Story Blocks

Intent:

Mission Bay blocks which combine 4-story and 3-story buildings are based upon the model of the Marina which has 25-foot wide row houses at the mid-blocks and larger buildings to mark corners. Controls and prototypes for mid-block buildings in Zone 3 are based on traditional San Francisco row houses with frequent walk-up entrances facing the street and facade articulations at 25-foot intervals. The corner buildings may either follow this model or like some Marina buildings have the proportions and organization of an urban Palazzo. Buildings of this type do not have 25-foot facade articulations but do have to provide visual interest. Buildings should have large and prominent central entrance lobbies facing the street and elaborated cornices or strong overhanging roof forms. Townhouses are permitted in Zone 3 and encouraged around mid-block mini-parks.

Marina Block

Guidelines:

Density:

Permitted densities in Zone 3 should be a minimum of 75 du/ac and a maximum of 85 du/ac. Exceptions are permitted as follows: the density may be lowered to 55 du/ac if 50% of the units within are family units. Density may be increased to 95 du/ac for housing of the elderly. Density calculations include mid-block lanes in the acreage but exclude public mini-parks.

Lot Coverage:

Except for the mid-block lane and public mini-park, 100% lot coverage should be permitted at ground level. Permitted uses at the ground level are parking, building entrances, storage, mechanical facilities and indoor and/or outdoor common areas. Above the ground level, the maximum lot coverage for blocks with 3- and 4-story buildings is 70% excluding the area of mid-block lane and mini-park. Decks and balconies above the podium which face on the street should be permitted only above the podium and/or within the area permitted by the bay window and sidewalk encroachment guidelines.

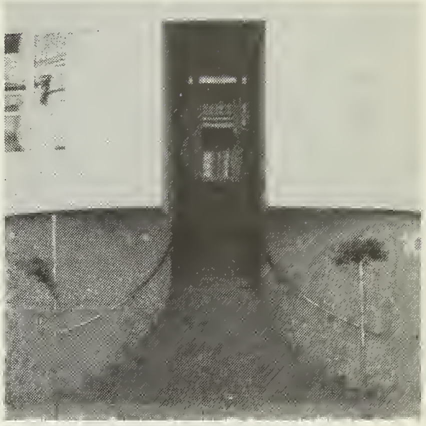
Blank unarticulated base
(not permitted)

Height:

The maximum building height for a 4-story building should be 55 feet and for low-rise walk-ups should be 45 feet. No 4-story buildings should be permitted along the mid-block lane.

Entrance Frequency:

Buildings less than 4 stories should have a street entrance each 50 feet or less. Four story buildings may have either street entrances each 50 feet or a central lobby. Central lobbies may be either at the first residential level accessible by entry stair from the street or at grade and double height as illustrated to the right. To help mitigate the impact of traffic noise along Third Street, 3-story walk-up type buildings facing onto the street are not required to have walk-up entrances but should have a central lobby and/or entrances from an inner court.



Entrance lobby with stair

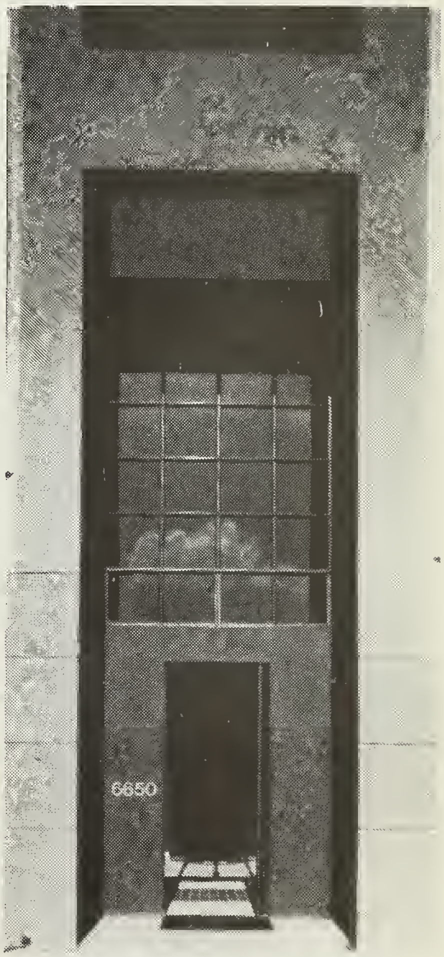
Building Bases:

Blank, unarticulated bases are not permitted. Four story buildings should employ one or both of the following treatments of building bases.

1) Building entrances to lower level units each 50 feet or less to supplement a centrally located entrance lobby.

2) Planter boxes integrated with the building base or planted niches not less than 4 feet in height and 1 foot in depth, for at least 50% of the street frontage. (For illustration see Low-Rise General Guildelines; Sidewalk Encroachments).

Openings to parking areas for light and ventilation should be provided with grills that are sufficiently opaque to block the view of parked cars from the street. Doors should be opaque.



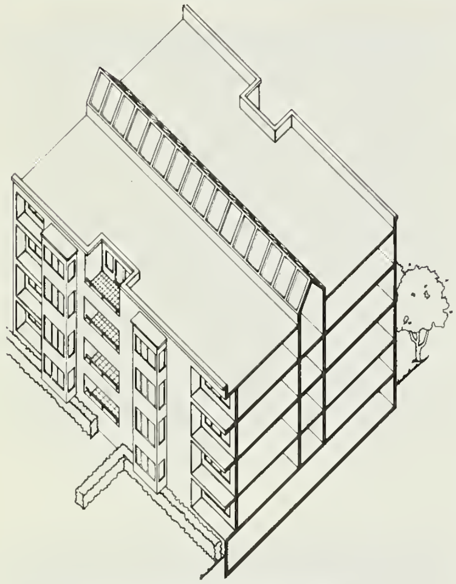
Double height lobby at grade

Building Articulation:

Except for 4-story buildings located on corners of streets (but not mid-block lanes), the following requirements apply. There are several means of creating the 25-foot modulation which is typical of row house streets in San Francisco and there are a variety of ways of combining these devices to achieve the intent described below.

1) Changes in cornice height a minimum of 2 feet each 25 feet of building width with perpendicular returns of not less than 4 feet in order to avoid the appearance of applied false fronts.

2) Changes in wall plane not less than 1 foot in depth and not less than 2 feet in width each 25 feet of building width for the full height of the building.



4-story building prototype:
stacked flats

3) Bay windows linked with cornices to form 15 to 30 foot articulations.

4) Changes in color or material and fenestration each 25 feet of building width.

Low-rise walk-ups and townhouses must incorporate at least two of the above. (For illustrations see Zone 2; Building Articulation.) Building articulation for 4-story buildings is accommodated by the guidelines for building bases and entrance frequency.

Open Space:

Each unit should have 80 square feet of private or 105 square feet of common usable open space. All usable landscaped area on the podium above parking may be included in the usable open space calculation.

Building Separation:

Adjacent buildings should be separated to ensure privacy, a reasonable view and light for inner rooms. The minimum separations between building faces are as follows:

front to front	30 feet
front to rear	30 feet
rear to rear	30 feet
front to side	30 feet
rear to side	15 feet *
side to side	none

* required only if either surface provides required light.

Building Length:

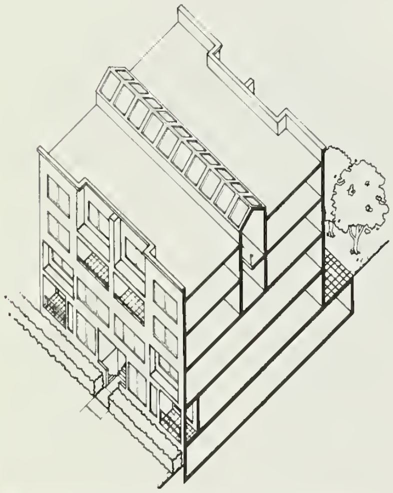
Four-story buildings should not exceed 125 feet in length.

Building Orientation:

Four-story buildings should have the long axis oriented in a north-south direction to avoid casting shadows on open space.

Unit Orientation:

Residential units along Third Street should be through type units with outward light and view orientation in at least two directions.



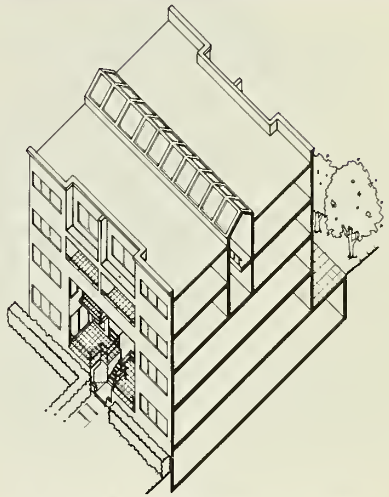
4-story building prototype:
stacked duplex units

Mid-block Lanes:

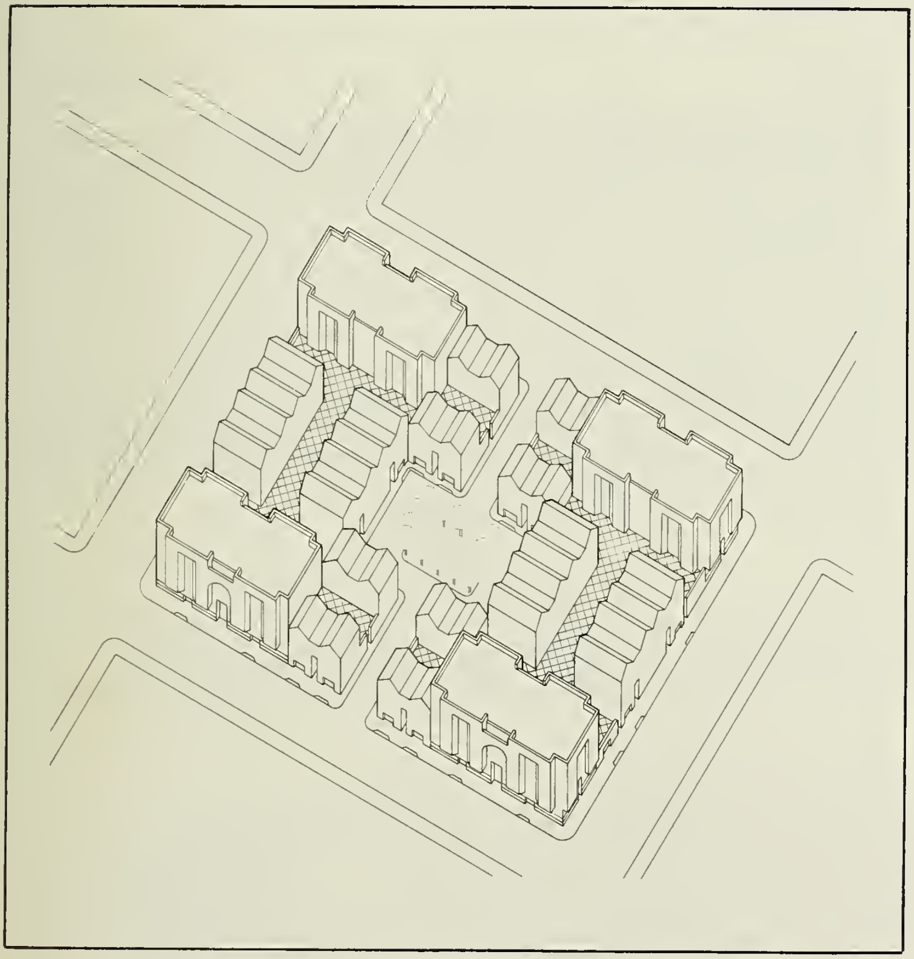
Each block should be bisected by at least one mid-block lane. The lane should be 35 feet building face to building face. On-street parking should be permitted on one side.

Mini-parks:

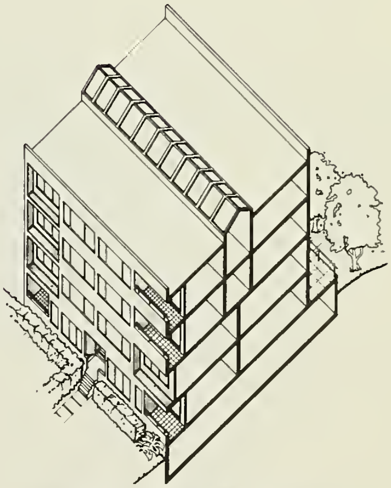
Within each block there should be a public mini-park of not less than .075 acres or 3,300 square feet, except where specifically designated otherwise by the Mission Bay Plan. Mini-parks should not be on street frontages, should only be accessible by mid-block lanes and should provide trees and seating.



4-story building prototype: Duplex unit over flats



Typical combined 3- and 4-story block



4-story prototype: Flats over stacked duplex

San Francisco Neighborhood commercial street

7.2.2.5 Zone 4: Mixed-Use Neighborhood Commercial/Housing Blocks

Intent:

The role of the neighborhood commercial street should be to service the needs of the surrounding residents of Mission Bay and to provide the lively neighborhood focus that Chestnut Street gives to the Marina and Clement Street to the inner Richmond. Commercial space should occupy all at-grade frontages along the street. Metered on-street parking should be provided to accommodate short-term parking. Above the ground level commercial space, low-rise walk-up units should be oriented toward the streets or the mid-block lane. Their entrances should be interspersed with the commercial entrances along the street.

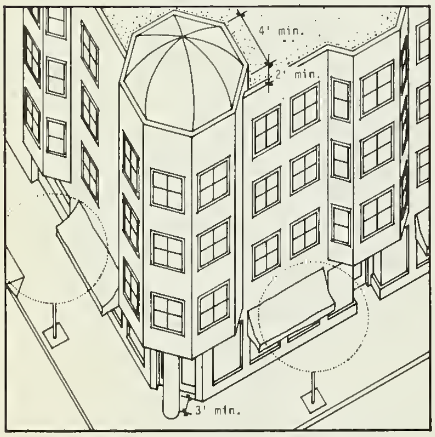
Guidelines:

Density:

Permitted density in Zone 4 should be 65 du/ac. Density calculations include mid-block lanes in the acreage.

Lot Coverage:

Not including the mid-block lane 100% lot coverage should be permitted at the ground level. Permitted uses at the ground level should be limited to parking, building entrances, storage, mechanical facilities and commercial space. Frontages should be limited to building entrances and/or commercial space. Above the ground level, the maximum permitted lot coverage should be 75%, excluding the area of the mid-block lane.



Neighborhood commercial corner

Height:

The maximum building height for a 4-story building should be 55 feet and for low-rise walk-ups should be 45 feet. No 4-story buildings should be permitted along the mid-block lane.

Building Articulation:

The typical San Francisco pattern of corner store entrances and corner bay windows should be repeated on the neighborhood commercial blocks of Long Bridge Street. Bay windows should project from both sides of corners and have a cornice, parapet or roof at least 2 feet higher than the adjacent 10-foot section of building face. There should be a freestanding column at the corner of the building. The ground level facade should be recessed not less than 3 feet behind this column (measured diagonally at 45 degrees) and there should be a building entrance at the corner. This is required only along Long Bridge Street which is the principal commercial street.

Entrance Frequency:

As a prevailing pattern there should be a residential or commercial entrance or podium access at least each 50 feet along streets and mid-block lanes. Corner buildings should be permitted to have entrances on both street facades. To help mitigate the impact of traffic noise along Third Street, 3-story walk-up type buildings facing onto the street are not required to have walk-up entrances but should have a central lobby and/or entrances from an inner court.

Open Space:

Each unit should have 100 square feet of private or 125 square feet of common usable open space. Common stair access should be provided from the street and the parking areas to the podium. All usable landscaped area on the podium above parking may be included in usable open space calculation.

Building Separation:

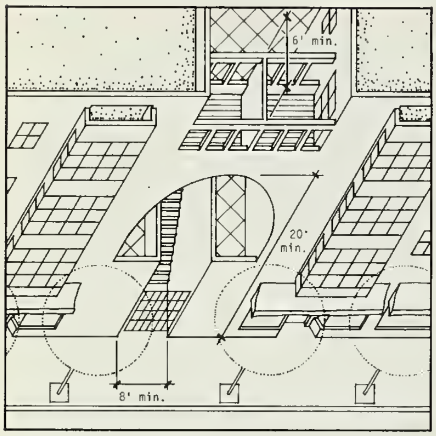
Adjacent buildings should be separated to ensure privacy, a reasonable view and light for inner rooms. The minimum separations between building faces are as follows:

front to front	30 feet
front to rear	30 feet
rear to rear	30 feet
front to side	25 feet
rear to side	15 feet *
side to side	none

* required only if either surface provides required light

Unit Orientation:

Residential units along Third Street should be through type units with outward light and view orientation in at least two directions.



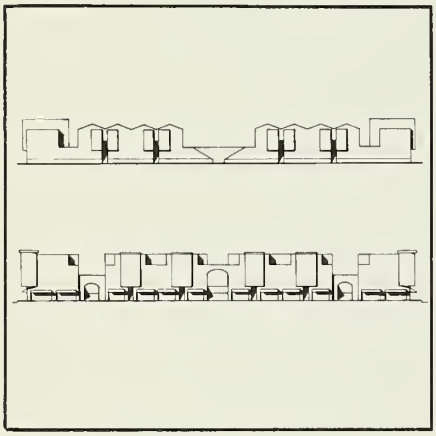
Stair to podium

Commercial Space:

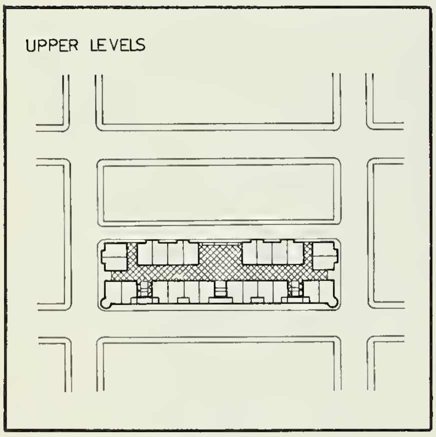
The design guidelines for commercial space within this residential block type are stated in the Retail Design Guidelines Section.

Podium Access:

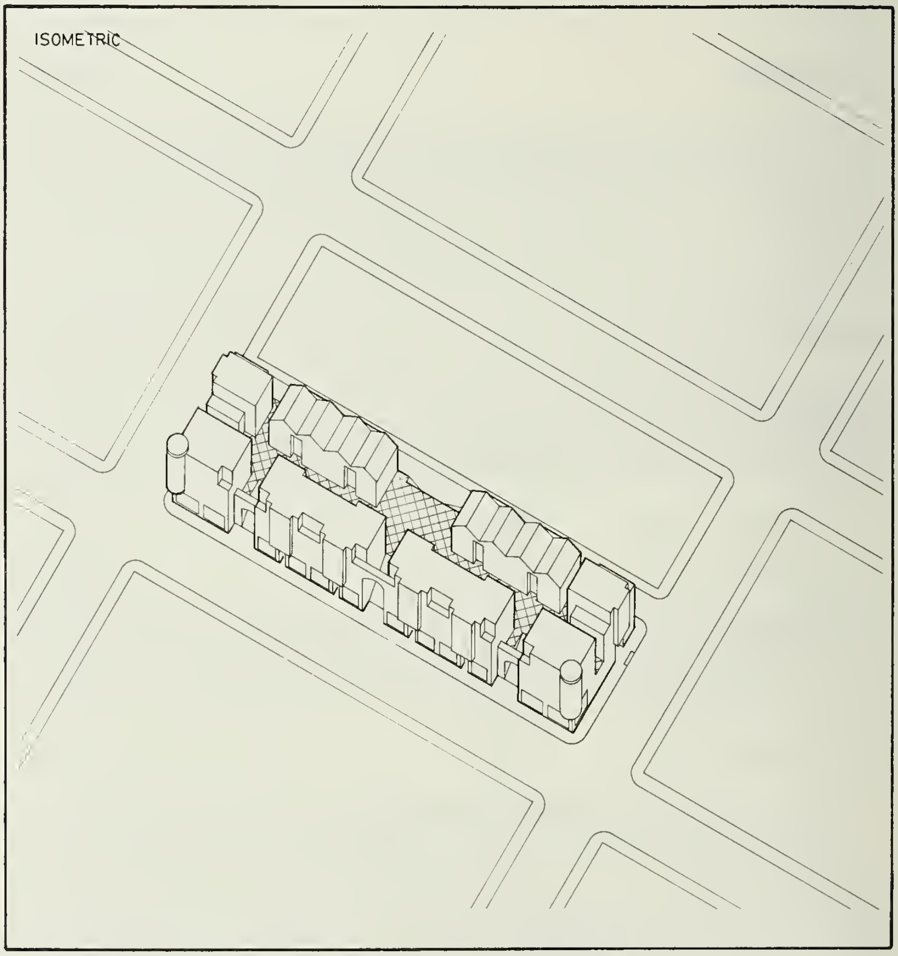
Pedestrian access to the podium by stair perpendicular to the street should be provided along the commercial street and mid-block lane. The minimum width of the stair should be no less than 8 feet. Minimum clear height above the stair should be 20 feet. Construction over the stair is permitted and encouraged and not less than 6 feet in depth measured in plan from the building face along the street, as illustrated to the left. Podium stairs should be private and secured by transparent decorative iron gates.



Typical elevations



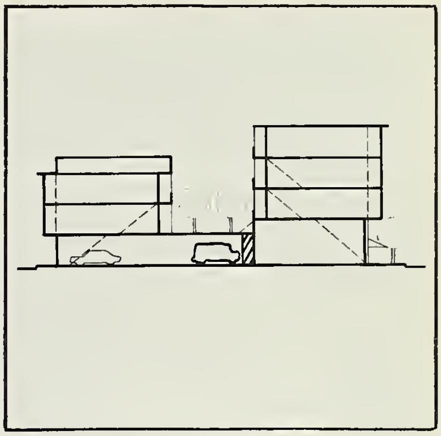
Typical block plan



Neighborhood Commercial/Housing half-block

Mid-block Lanes:

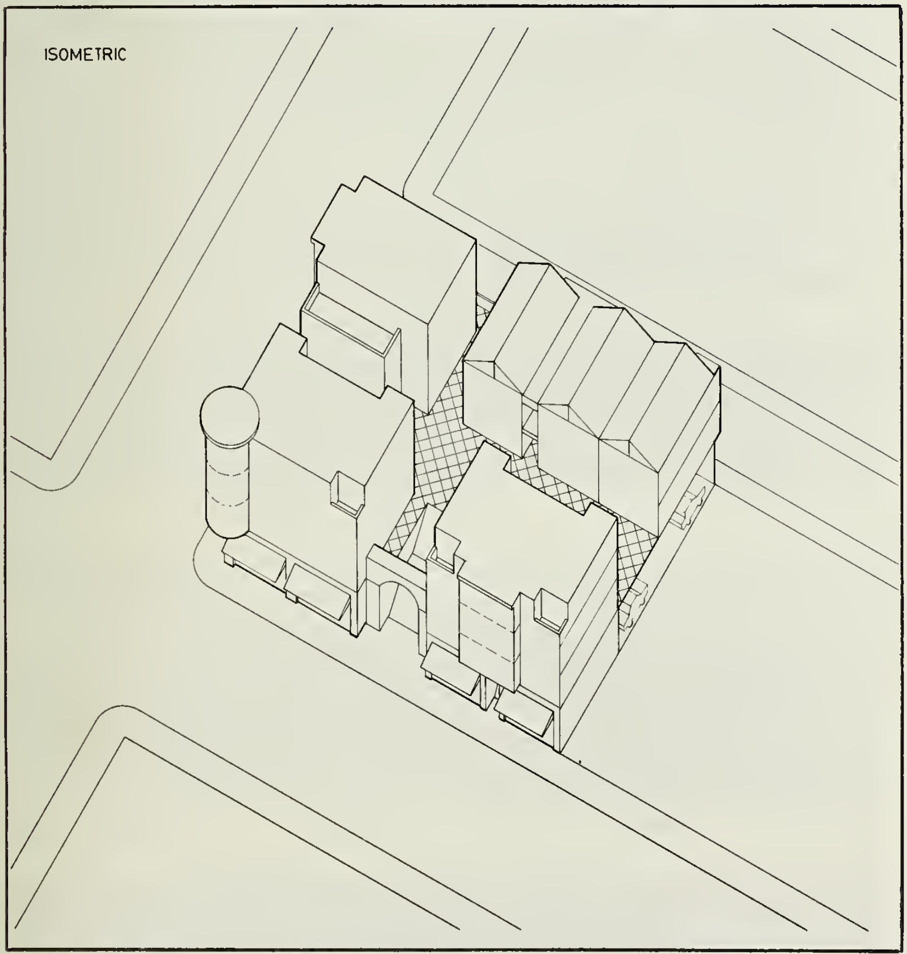
Each half-block should have a mid-block lane which runs parallel to the street that the commercial space faces. The lane should be 35 feet building face to building face. On-street parking should be permitted on one side.



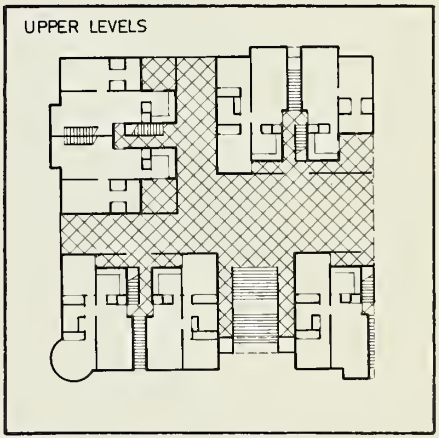
Typical section

Service and Loading Areas:

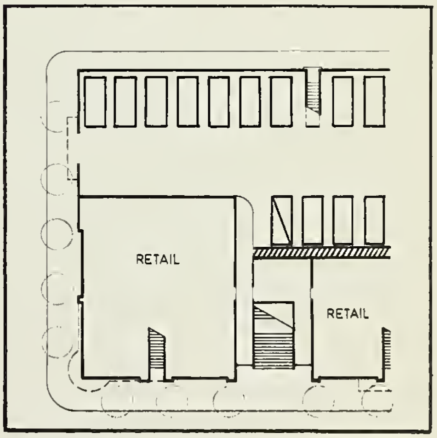
To discourage the use of streets for loading and unloading there should be a designated zone within the parking area which permits direct access to the rear of retail spaces for delivery vans and small trucks. The zone should run along the rear of the retail spaces and be no less than 5 feet clear in depth. Additionally at least two parking spaces per half block adjacent to the zone should be reserved for delivery vehicles as illustrated to the right.



Neighborhood Commercial corner



Typical plan at podium



Typical ground level plan

Mid-rise landscaped podium

7.2.3 Mid-Rise Residential Blocks

7.2.3.1 General Intent and Guidelines

Mid-rise complexes of moderate to high density give shape and focus to specific areas within Mission Bay and are necessary to achieve density objectives. The resolution of the following design concerns are necessary for compatibility with the surrounding neighborhood: (1) the architectural design of street frontage; (2) the landscape treatment of the parking podium; (3) the relationship of the units to each other; (4) articulation and shaping of the mid-rise buildings, which because of the height limits will tend to have low and squat proportions.

Building articulations for low-rise buildings in Mission Bay are based upon the clear and long established precedents set by the historic residential fabric of San Francisco. For larger, mid-rise buildings the precedents are less clear and the requirements below contain a degree of flexibility with regard to how mid-rise buildings should be modeled. The articulation requirements which follow will permit buildings to be broken into vertical segments, have stepped upper floors, and be shaped in various other ways. Mid-rise buildings will constitute the skyline of Mission Bay and their tops should employ hips, gables, rooftop loggias and other devices to achieve distinct silhouettes.

The mid-rise units should take advantage of the bay and city views. The taller buildings should be positioned to mark the corners of blocks and entrance lobbies should be oriented to the street. Low-rise walk-up units should be located mid-block along the street and on the podium, preferably with entrances from the street.

It is essential not to overlook the importance of common space as circulation space for the residents of these units. Its use would be inhibited by providing a separate and direct access route from parking garages to mid-rise corridors. Access to the units from either parking areas or the street should utilize the podium over parking as a transfer level. Direct access from parking levels to lobbies should be permitted when the lobbies themselves consitute significant common spaces are at least 12 feet in height and have views to street, parks or common open space.

The characteristic one and two level podiums should be articulated with entrance lobbies, retail frontage, and podium access as well as decorative treatments of the base in order to enliven the streets and make the buildings visually interesting.

Setbacks:

The prevailing pattern of residential building frontages should be continuous at the back of the sidewalk on both streets and mid-block lanes, except where specifically designated otherwise by the Mission Bay plan.

Street Trees:

Streets and mid-block lanes should have street trees in accordance with the Mission Bay Street plan.

Solar Orientation:

As a general practice, buildings should be oriented so that a majority of primary living spaces receive direct sunlight. No dwelling unit may have only a true north orientation. Units in which the orientation is within the 10 degrees of north must have at least one additional exposure for at least 15% of its perimeter.

Bay Windows:

Housing in Mission Bay should employ the provisions for bay windows outlined in the San Francisco Planning Code. The following additional bay window projections should be permitted: (1) corner bays projecting up to 3 feet from the wall plane at streets and 2 1/2 feet from the wall plane at mid-block lanes of not greater than 15 feet in length and totaling no more than 40 square feet; (2) bays at the edges of buildings or party walls with a minimum separation of 4 feet to the outer face of the bays; (3) projecting cornices linking bays, particularly where used to establish 25-foot building articulation.

Security Access:

Secured routes from parking to units are desirable. Garages should be secured from unwanted entry. For mid-rise units the access to the units from the parking shall be to the podium which serves as a transfer level. Elevator access from the parking and stair access from the street to the podium should be required.

Open Space:

Residents should have access to usable open space whether common or private in the quantities specified in each zone. Usable open space should be as defined in Section 135 of the San Francisco City Planning Code.

Building Articulation:

Buildings above the podium should have their primary walls or edges parallel to adjacent streets in order to reinforce the continuous street edge and orientation. Buildings five or more stories above the podium should have limitations on their total building areas as follows. The plan of a mid-rise building should fit within a circumscribed rectangle which does not exceed 8000 square feet nor have a maximum horizontal dimension greater than 110 feet. The total area of all floors above the podium should not exceed 80% of the area of the circumscribed rectangle times the number of floors above the podium. See plan left, below.

Building Base and Street Frontage:

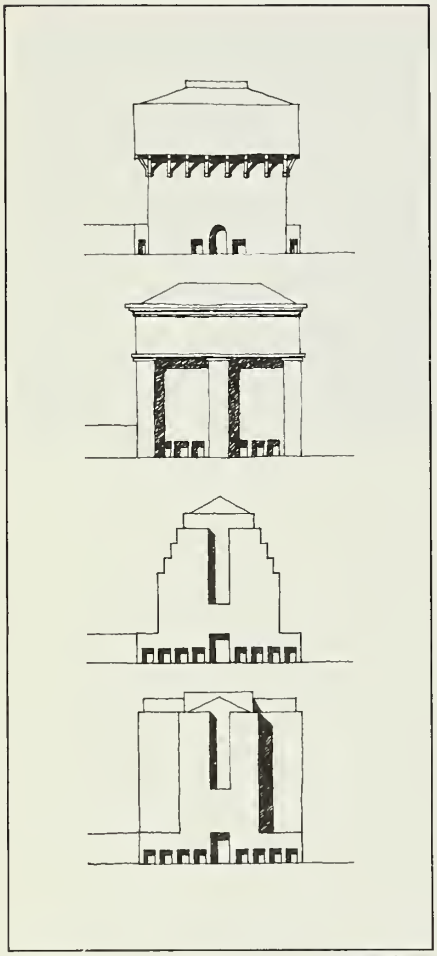
Blank, unarticulated building bases should be avoided. No podium wall which is unbroken except by garage doors and/or ventilation grills for a length greater than 50 feet permitted. The following devices may be used singly or in combination to modulate the podium wall:

1) retail frontage
2) entrance lobbies
3) common areas or community facilities with street access
4) walk-up entrances to lower level units to supplement lobbies
5) podium access stairs not less than 8 feet in width.
6) planted niches or planter boxes with irrigation provided,, not less than 4 feet in height and 1 foot in width, not less than 10 feet wide along the street front, separated by not more than 5 feet from one another and integrated with the design of the building base.

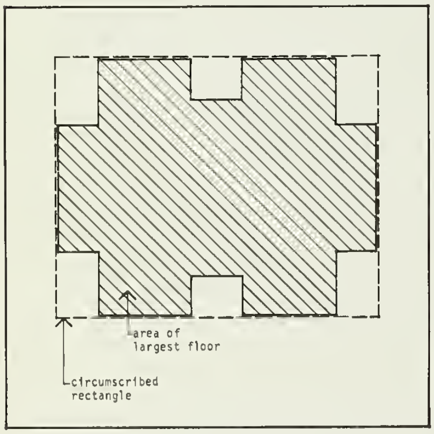
Where parking occurs at the base of building along a street or mid-block lane frontage there should be planted niches or planter boxes with irrigation provided for not less than 50% of the parking frontage. Openings to parking areas for light and ventilation should be provided with grills that are sufficiently opaque to block the view of parked cars from the street.

Off-Street Parking:

Each dwelling unit should have one parking space allocated for its use with the exception of elderly housing (typically 1 space per five units). Units over a garage podium should have resident parking within the parcel boundary with shared access.



Alternative building articulation



Building articulation plan diagram

Curb Cut:

In order to minimize the impact of automobiles, no curb cut or garage door facing the street or mid-block lane should be wider than 12 feet. Without compromising the accessibility of the units, curb cuts should be spaced and arranged to maximize on-street parking, minimize sidewalk interruptions, and allow opportunity for ground level landscaping.

On-Street Parking:

As is common in most San Francisco neighborhoods, on-street parking should serve as additional resident parking and guest parking. Parking spaces should be located adjacent to the sidewalks and along the streets designated by the Mission Bay Street Map.

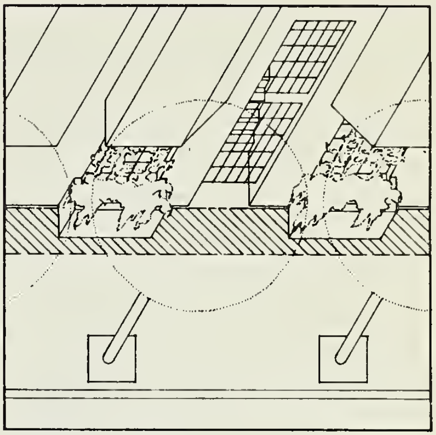
Light-in Corridors:

Double loaded corridors greater than 25 feet in length should have natural light from windows or skylights equal in area to 10% of the floor area.

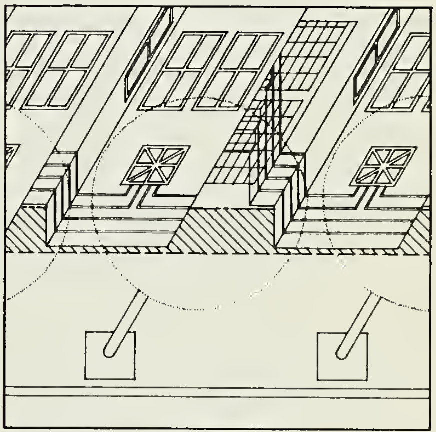
Sidewalk Encroachments:

Intrusions of architectural projections and landscaped areas into the sidewalk areas are encouraged. To facilitate these intrusions there should be an encroachment zone along streets of up to 4 feet and along mid-block lanes of 1 foot. The encroachment zone would be private property but should be treated as a public sidewalk extension to the extent the zone is not occupied by permitted encroachments as illustrated to the right. Among the options for mid-rise blocks are: Stairs and stoops with a 4-foot maximum encroachment and planter boxes, bay or bow windows, and 3-foot maximum width columns all with a 3-foot maximum encroachment.

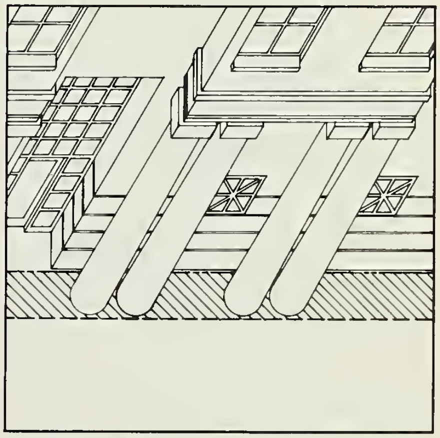
In every 25 feet of building frontage at least 67% of linear footage of the encroachment zone should remain unobstructed by the foregoing encroachments, except where a staircase to a second level dwelling unit entry runs laterally across the face of the building. Projections, such as sills, door frames, belt courses and rusticated materials should be permitted to project up to 6 inches over the sidewalk without limitation. Where garage doors occur sloping driveways should be protected by handrails or planters (and are considered part of unobstructed area).



Planter boxes



Bay or bow windows

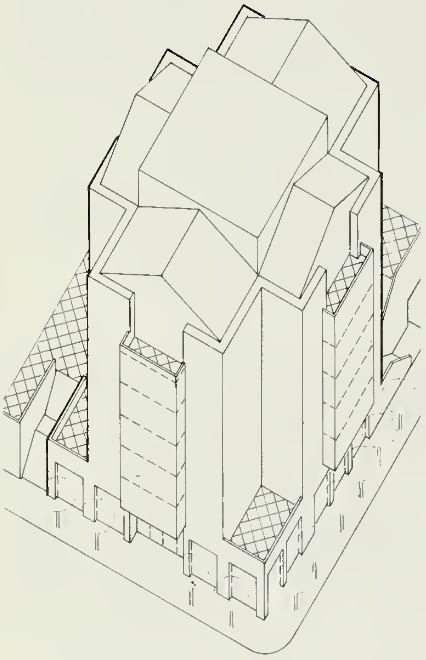


Columns

7.2.3.2 Zone 5: Moderate Density - One Level Parking Podium

Intent:

Most of the design intentions and specific requirements for Zone 5 are covered in the previous section on General Guidelines for Mid-Rise Buildings. Zone 5 occurs within the plan adjacent to and integrated with the low-rise residential neighborhood. Because these buildings are along typical residential streets, it is particularly important that their street frontages appear lively and visually interesting.



8-story mid-rise

Guidelines:

Density:

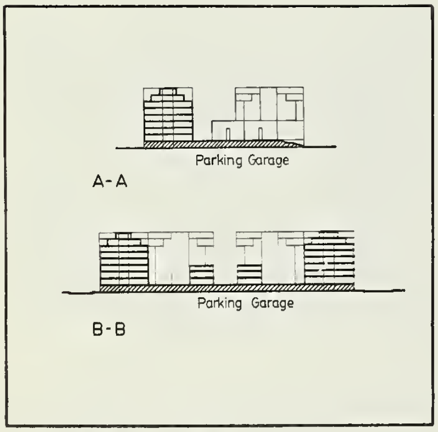
Permitted density for Zone 5 should be a minimum of 90 du/ac and a maximum of 120 du/ac. The density may be raised to 220 du/ac for housing the elderly when the parking requirement is reduced. Density calculations would include the mid-block lane in the acreage where it occurs.

Lot Coverage:

100% lot coverage should be permitted at the ground level. Permitted uses at the ground level are parking, building entrances, storage, mechanical facilities, and commercial space. Above the ground level the maximum permitted lot coverage should be 75%, excluding the area of mid-block lanes where applicable.

Height:

The maximum building height for an 8-story building over a one level podium is should be 85 feet, for low-rise walk-ups should be 45 feet and for four story buildings should be 55 feet. The maximum height for the one level podium should be 10 feet.



Typical sections

Open Space:

Each unit whether located in an 8-story mid-rise or 4-story low-rise or 3-story walk-up should have 50 square feet of private or 100 square feet of common usable open space. All usable landscaped area on the podium above the parking may be included in the open space calculation.

Building Separation:

Adjacent buildings should be separated to ensure privacy, a reasonable view and light for inner rooms. The minimum separations between building faces are as follows:

front to front	30 feet
front to rear	30 feet
rear to rear	30 feet
front to side	25 feet
rear to side	15 feet *
side to side	none

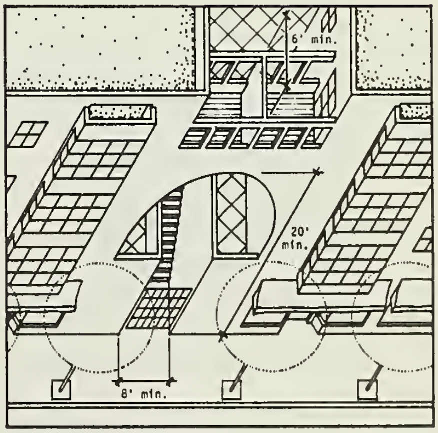
* required only if either surface provides required light.

Base Height:

It is desirable to reduce the base height of buildings by depressing parking areas. However, soils conditions in Mission Bay may require long span framing systems with greater than normal structural depths, in order to minimize the number of required pilings. As a general rule the ground level parking areas should be depressed within the limits of the existing water table, so that the first residential level is no more than 8 1/2 feet above grade.

Podium Access:

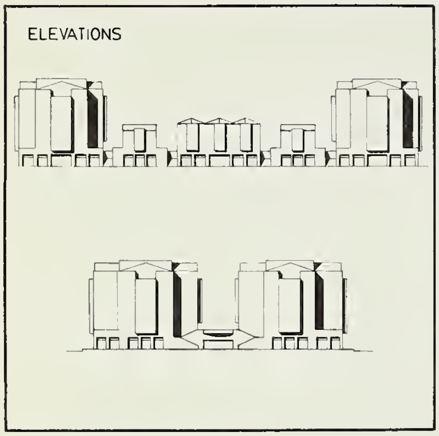
Pedestrian access from the street to the podium by stair should be provided along at least two streets or a mid-block lane and a street. The stair run should be perpendicular to the street and no less than 8 feet in width. Minimum clear height above the stair should be 20 feet. Construction over the stair should be permitted and encouraged and not less than 6 feet in depth measured in plan from the building face at the street as illustrated to the right. These stairs should be private and secured by transparent decorative iron gates.



Stair to podium

Mid-block Lanes:

A mid-block lane would increase on-street parking, and both vehicular and pedestrian access to the project and provide a building entrance off of busy streets. Therefore, mid-block lanes should be encouraged but not required. The lane should be 35 feet building face to building face and on each side and on street parking permitted on one side.



Typical elevations

7.2.3.3 Zone 6: High Density - Two Level Parking Podium

Intent:

Zone 6 occurs within the plan along China Basin Channel and at the edges of the project where high density housing is least disruptive to the texture and scale of the residential neighborhood. Most of the design intentions and specific requirements for Zone 6 are covered in the section on Mid-Rise General Guidelines.

Guidelines:

Density:

Permitted density in Zone 6 should be 150+ du/ac. The density may be raised to 220 du/ac for housing for the elderly when the parking requirement is reduced. Density calculations include the mid-block lane in the acreage where it occurs.

Lot Coverage:

100% lot coverage should be permitted at the ground and second levels. Permitted uses for these levels are parking, building entrances, storage, mechanical facilities and street-accessed commercial service. Above the two level podium, the maximum permitted lot coverage should be 75%.

Height:

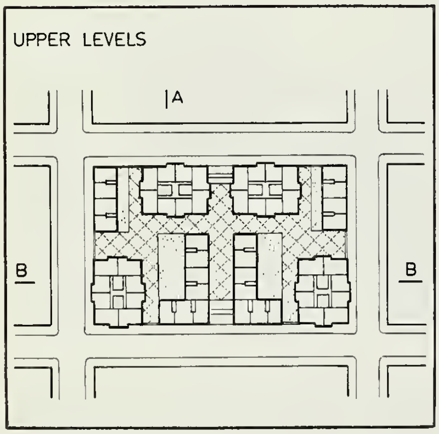
For 8-story mid-rise over a 2-level podium the maximum height should be 85 feet and for the 2-level podium should be 20 feet.

Building Separation:

Adjacent buildings should be separated to ensure privacy, a reasonable view and light for inner rooms. The minimum separations between building faces are as follows:

front to front	30 feet
front to rear	30 feet
rear to rear	30 feet
front to side	25 feet
rear to side	15 feet *
side to side	none

* required only if either surface provides required light.



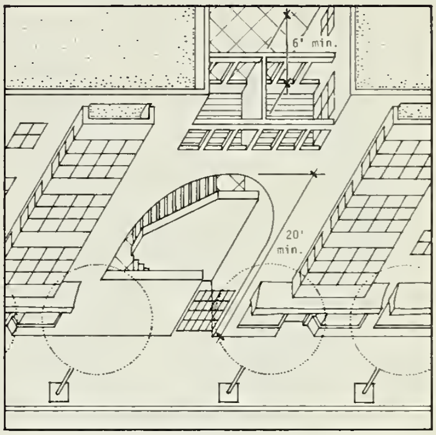
Typical block plan

Open Space:

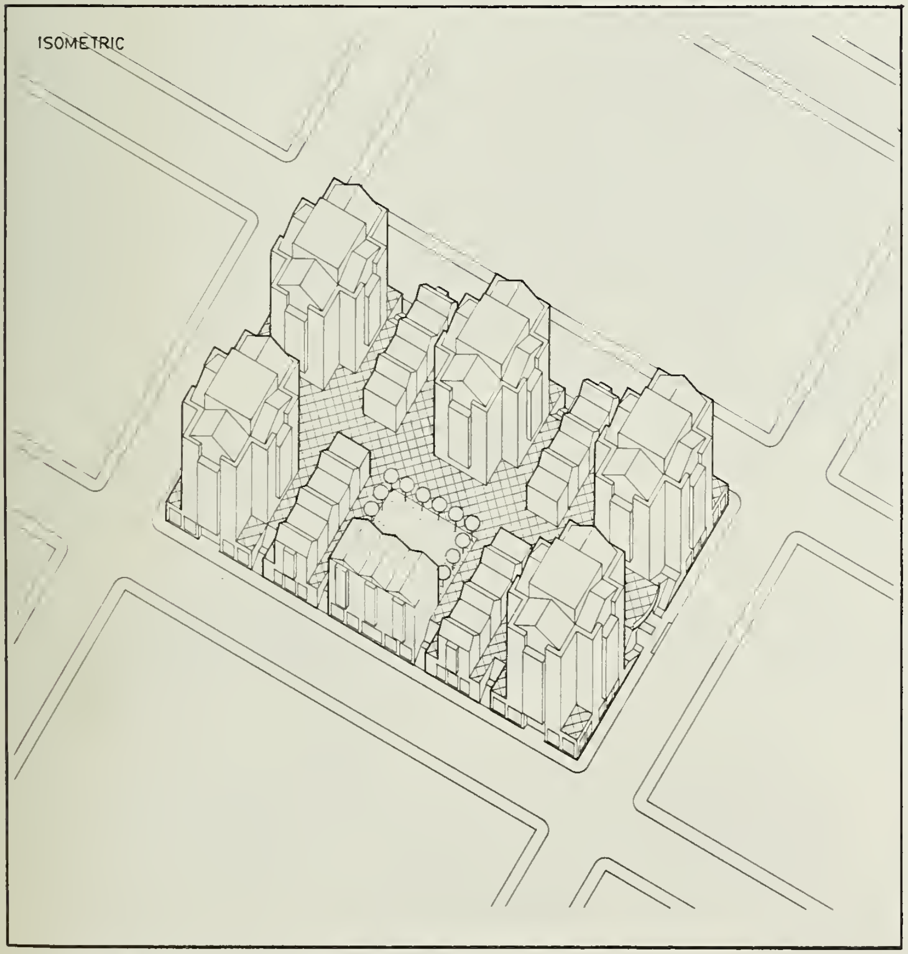
Each unit whether located in an 8-story mid-rise or 4-story low-rise or 3-story walk-up should have 50 square feet of private or 80 square feet of common usable open space. All usable landscaping on the podium above the parking should be included in the usable open space calculation.

Podium Access:

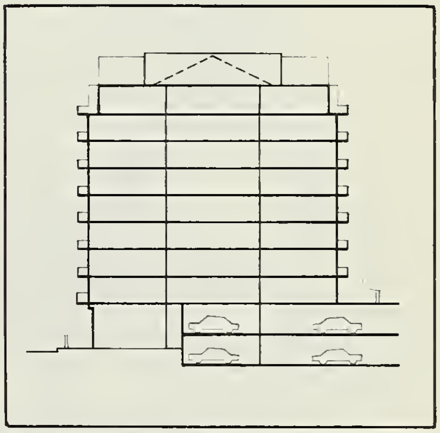
Pedestrian access from the street to the podium by stair should be provided along at least two streets or a mid-block lane and a street. For 2-level podiums this may be a switch-back or straight run stair parallel to the street and 3 feet 8 inches wide. Clear height above the stair should be 20 feet. Construction over the stair should be encouraged and not less than 6 feet in depth from the building face



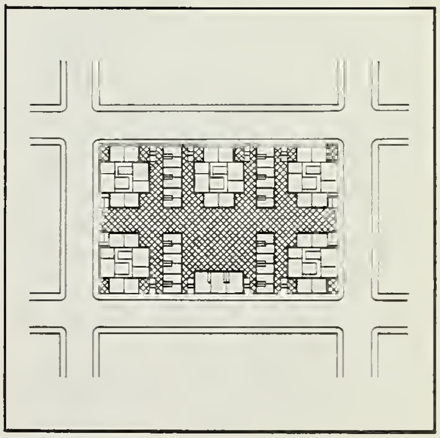
Stair to podium



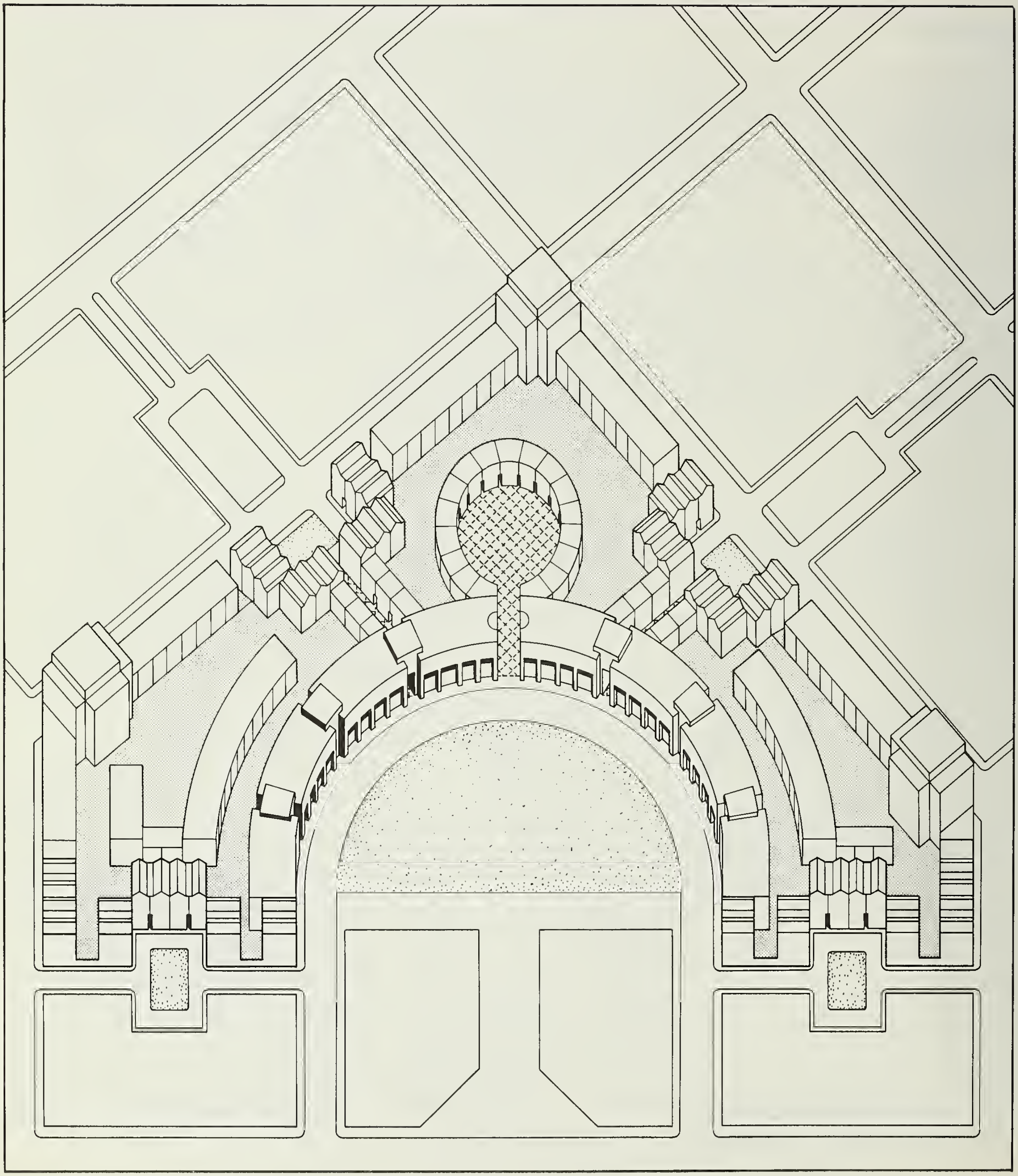
Two-level podium mid-rise block



Typical section



Typical block plan



Illustrative isometric of Crescent Block

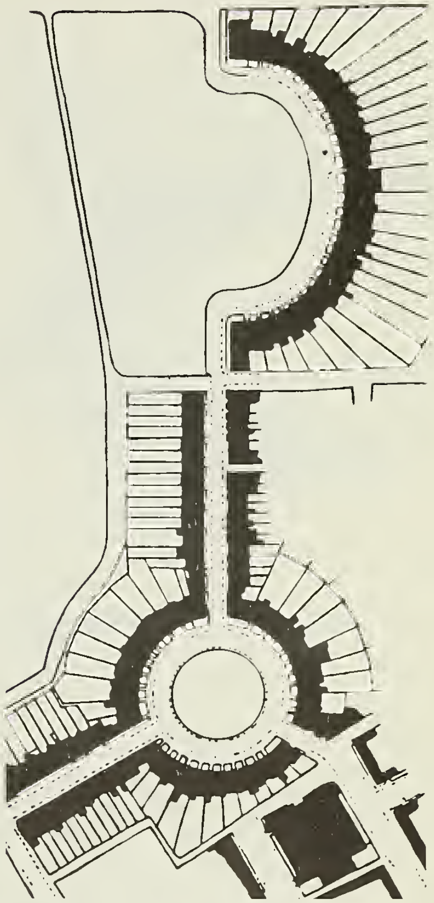
7.2.4 Building Special Elements

7.2.4.1 Zone 7: The Crescent

Intent:

The crescent block is a special focal element within the Mission Bay plan and is shaped by design intentions somewhat different from those which shape the rest of the housing. While other housing elements of the residential neighborhood are patterned after traditional San Francisco row house neighborhoods, the Crescent has a more monumental intent. Its models are Royal Crescent at Bath, Regents Park in London and Karl Marx Hof in Vienna. Its role as a neighborhood focus should be like that of the Palace of Fine Arts in the Marina which gives identity to the blocks of continuous residential fabric around it.

The crescent block has several parts, each containing buildings of different scale and character. The crescent building itself should constitute a special and memorable landmark, rich in surface and detail, with spacious lobbies and a commanding presence around Crescent Park. The townhouse court west of the Crescent terminating the axis of the central bay view corridor park should be small, intimate and luxurious. The edges of the crescent block where they confront other parts of the Mission Bay residential neighborhood should have the typical character of Mission Bay low-rise walk-up blocks.



Royal Crescent at Bath

Guidelines:

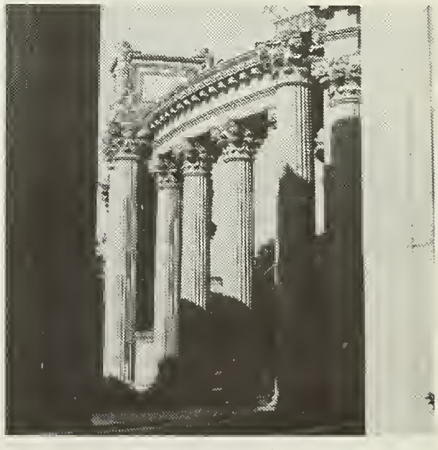
The guidelines below refer to the semi-circular section of the Crescent facing Crescent Park.

Height:

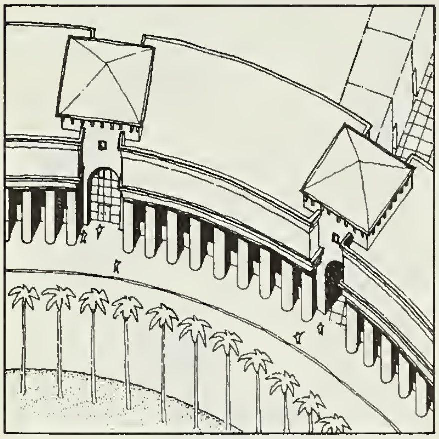
The crescent building should have a uniform height of five stories and should be a maximum of 50 feet high.

Paving:

The townhouse courtyard and pedestrian lanes of the crescent block should be paved with precast unit pavers, cobbles or brick (not embossed concrete). The paving should extend to the building faces with no curbs. Bollards, not curbs, should be used to protect buildings bases from automobiles.



Palace of Fine Arts in the Marina



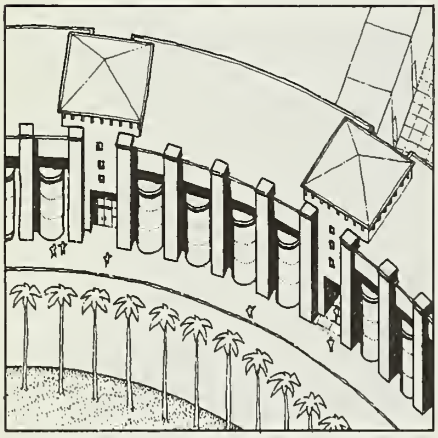
Arcade supporting
overhanging floors

Building Articulation: Crescent Facade

The Crescent is divided into two parts by a central lane serving the townhouse court behind. Each of the two parts of the crescent facade is divided into four equal segments.

The elements creating the subdivisions in the crescent facade are lobbies and openings to pedestrian lanes that link Crescent Park to Sixth Street and Mission Rock Street. The pedestrian lanes should pass through apertures in the crescent building not less than 25 feet high nor less than 14 feet wide. Openings to entrance lobbies in the crescent facade should be similar in size, shape and detailing to the apertures to pedestrian lanes. Additional lobbies may be located facing the lane to the townhouse court between the two wings of the Crescent.

The eight equal segments of the crescent facade should have large consistent scale-making elements such as those illustrated to the left. In this case, the architecture should not be configured as an aggregation of small buildings. Appropriate scaling devices for these building elements are a large order of columns or column like elements supporting 1 or 2 upper floors or an entablature or cornice, not less than 5 feet high which projects to the face of the columns. Columns less than 4 stories high should be spaced not more than 14 feet apart and have no plan dimension less than 3 feet. Columns or pilasters extending 4 or more stories high may be spaced up to 27 feet apart and be not less than 5 feet wide or 3 feet deep. Projecting bays or balconies between the columns may be up to 12 feet wide and 3 stores high. Projecting floors or cornices may also be interrupted at the entrance lobbies or apertures.



Full height columns

Interruptions in the Crescent to provide required daylight for corridors should be on the back or west side of the Crescent. (See Mid-Rise General Guidelines; Light in Corridors).

Design approaches that should specifically be avoided include the following:

1) Continuous aggregations of small scale elements with no larger scaling principle.

2) Breaking of the Crescent into smaller buildings.

The following guidelines refer to the court of townhouses west of the crescent building on Park North and Park South.

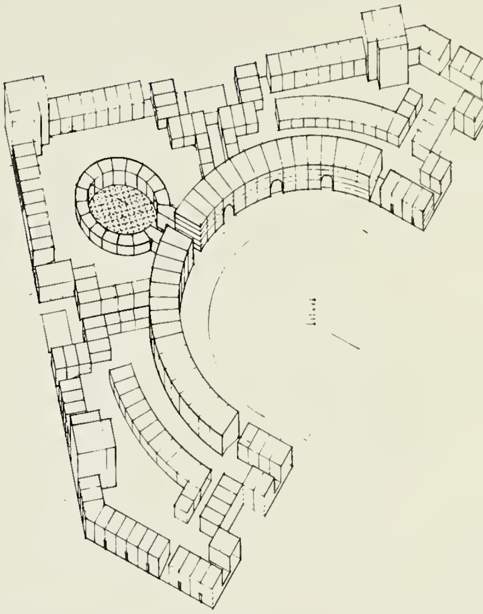
Entrance Frequency:

Each townhouse should have an individual walk-up entrance from the courtyard.

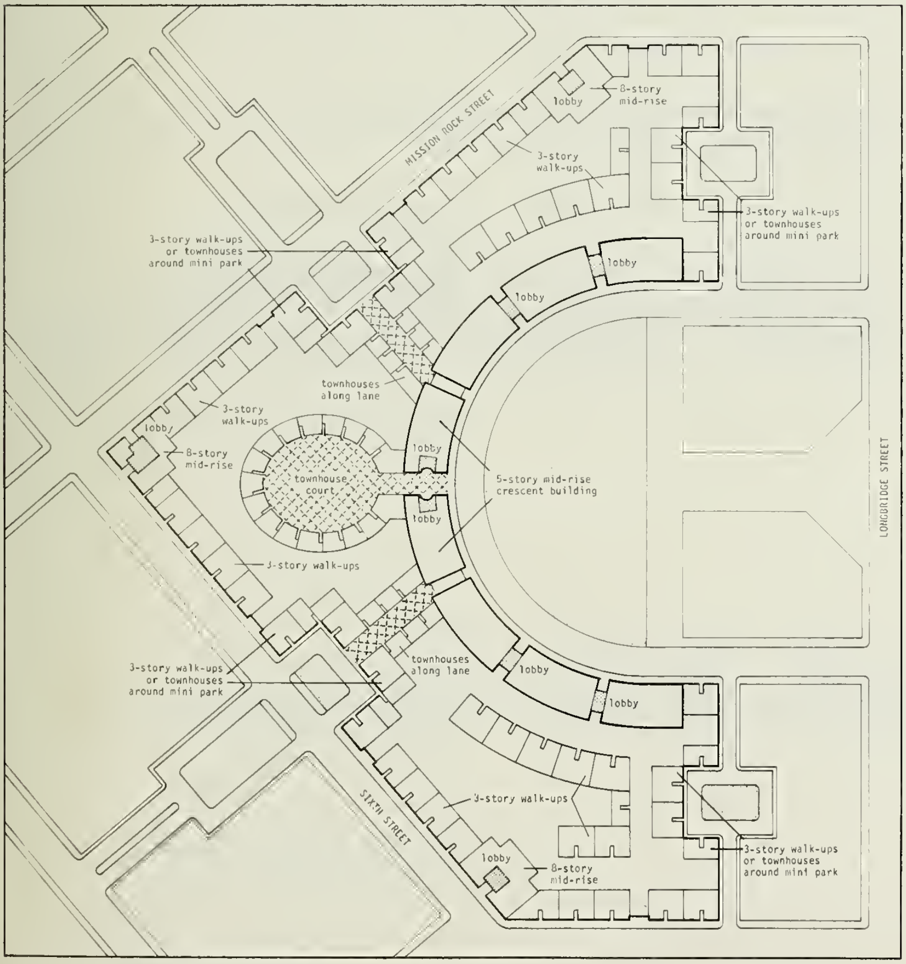
Curb Cut:

Each townhouse should have a separate garage. No garage door should be wider than 12 feet, nor constitute more than half the width of the house.

The remaining portions of the crescent block are either townhouses, low-rise walk-up units or moderate density mid-rises. The accompanying plan shows the location of each of these elements. Design guidelines for townhouses in the crescent block are the same as Zone 1, for low-rise walk-ups the same as Zone 2, for moderate density mid-rises the same as Zone 5.



Isometric view of crescent


8-story mid-rise
lobby
MISSION ROCK STREET
3-story walk-ups
3-story walk-ups or townhouses around mini park
3-story walk-ups or townhouses around mini park
lobby
lobby
townhouses along lane
3-story walk-ups
lobby
8-story mid-rise
townhouse court
lobby
lobby
5-story mid-rise crescent building
LONGBRIDGE STREET
3-story walk-ups
3-story walk-ups or townhouses around mini park
townhouses along lane
lobby
lobby
SIXTH STREET
3-story walk-ups
lobby
8-story mid-rise
3-story walk-ups or townhouses around mini park

Plan of crescent block

The sectors listed below are also elements of special importance within the plan. The building configurations shown are illustrations of the intent of the Housing Guidelines and height controls; and are intended to express the character desirable in Mission Bay. The maximum allowable building lengths are as indicated.

7.2.4.2 Bay Edge along Mission Bay Street

A range of 3-story walk-up buildings over parking with a Zone 2 or 3 classification.

7.2.4.3 North Edge of Channel

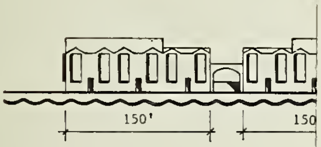
A combination of 3-, 4-, and 8-story buildings over a two level podium with a Zone 6 classification.

7.2.4.4 South Edge of Channel

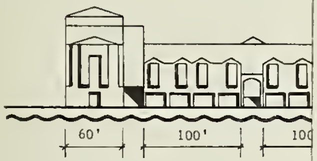
A combination of 3-, 4-, and 8-story buildings over a one level podium with a Zone 5 classification.

7.2.4.5 Block # 21 at Mission Rock Street Edge

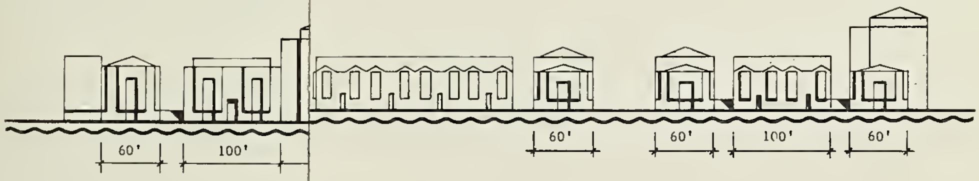
A combination of 3-story walk-ups over either neighborhood commercial or parking with a Zone 2 or 3 and Zone 4 classification. The special element is the mid-block section of 501 which serves as an end focal point on a cross axis to the crescent.



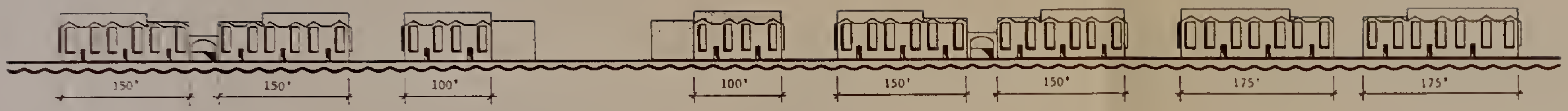
Bay Edge alone M



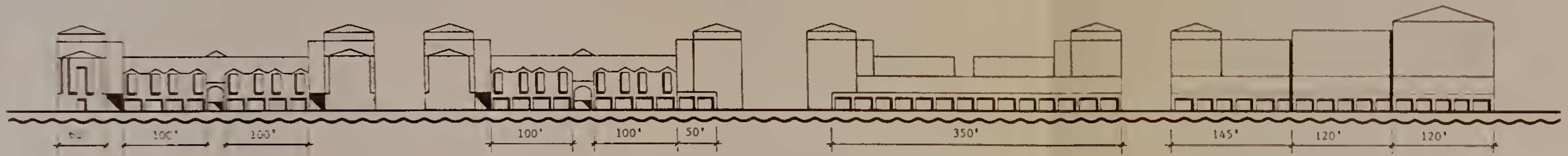
North Edge of Cha


60'
100'
60'
60'
100'
60'

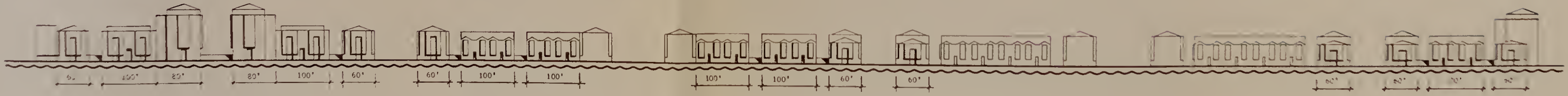
South Edge of C


150'
150'
100'
100'
150'
150'
175'
175'

Bay Edge alone Mission Bay Street


100'
100'
100'
100'
50'
350'
145'
120'
120'

North Edge of Channel along water


100'
80'
100'
60'
60'
100'
100'
100'
100'
60'
60'

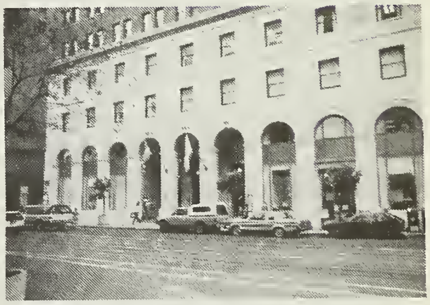
South Edge of Channel along water

7.3 OFFICE

7.3.1 Intent

The intent of this section of the Mission Bay Design Guidelines is to foster areas of office development which (1) define streetscape in the traditional manner of San Francisco commercial buildings; (2) create pleasant and usable public open spaces with urban character; (3) produce an urban fabric which breaks up large blocks and links separate developments with a system of public passageways and plazas; and (4) maximize views and solar access for office users and pedestrians.

The traditional San Francisco commercial streetscape can be seen throughout the city. Its character is determined by building walls which are parallel to the street, at the edge of the sidewalk and which often have street level colonnades. Entries puncture the buildings walls on major street frontages and are announced with recesses from the sidewalk, elegant materials and other special features. Ground level uses are open to the street, either as retail, service commercial spaces or offices with ample glazing, so that the lively activity of the street is maximized at the ground level of the buildings. Parking structures and extended blank building walls do not appear on the street.

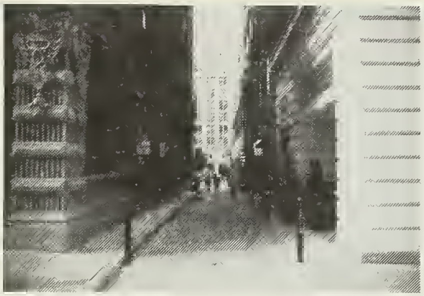

Commercial streetscape

There are many examples of San Francisco office and mixed-use projects which hold the street edges, at corners while allowing for public urban plazas at mid-block. Levi's Plaza and Opera Plaza are two such developments. Levi's Plaza illustrates the combination of through-block pedestrian passageway with a sunny public plaza, surrounded by retail uses and a major office lobby. Opera Plaza achieves a public courtyard at street level surrounded by retail which buffers upper levels of housing from the street. Golden Gateway Commons, also in San Francisco, employs street level retail to buffer above-grade structured parking and to define the street edge with a retail colonnade.

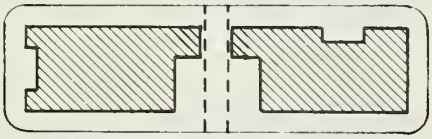
Levi's Plaza

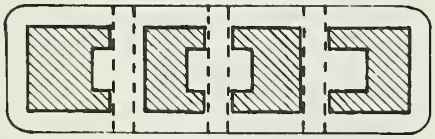
Lively activity at the street level helps create a more livable city. The arcades on three sides of Sidney Walton Park near the northeastern waterfront in San Francisco are a contemporary example of uses which enliven the street and adjacent open spaces. The arcades on the East and North sides of the park are sunny and wide enough to be usable for many activities. These structures allow for sidewalk cafes, sidewalk vendors, outdoor exhibits and temporary advertising. They also provide shelter for shoppers, places for office workers to have lunch and a buffer for office and housing from street traffic.

Arcade at Sidney Walton Park


Mid-block alley

Mid-block passage


Half Blocks


Quarter Blocks

Mid-block and quarter-block divisions

Desirable urban texture resulting from a network of mid-block passageways and courtyards can be seen in the area along Columbus near the Transamerica Pyramid. Mid-block alleys and pedestrian passageways subdivide the blocks, and public courtyards and plazas are located adjacent to these passageways.

The following guidelines describe specific rules and recommendations which will help create a desirable office environment in Mission Bay. The resulting environment will be connected by tradition to the city surrounding it and will add to the quality of life of workers, shoppers and passersby. See Appendix for examples of commercial prototypes for Mission Bay. Other issues, not considered in these guidelines, are to be considered on a case by case basis. These include trash disposal including recycling, mail service and utilities meter accessibility

Guidelines which appear on control maps include:

- Program by block
- Subdivision of office blocks
- Use Districts
- Building heights

7.3.2 Guidelines

Open Space in Office Areas

Each block should have 15% of its on-grade area dedicated to public open space. Of this open space, 65% should be open to the public 24 hours a day and should not be restricted by security requirements of the surrounding buildings. On the blocks north of the China Basin Channel, continuous open space is required through the mid-block, with a minimum width of 8 feet on either side of the north-south center line of the block with the streetscape designed to accommodate emergency vehicle access. Mid-block widths of 20 to 24 feet are recommended. There may be need to bridge over this space to connect an office building with its parking structure. A minimum clear height of 36 feet is required when a structure bridges over this space. Such bridges should not exceed 20 feet in width and should not shade open spaces. It is recommended that some of the other required open spaces be located along mid-block passageways.

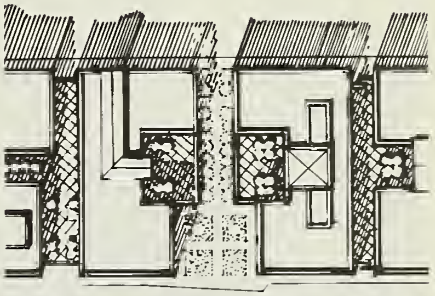
In addition to the mid-block public open spaces, blocks north of the Channel should have courtyards, passageways, and entry recesses located at the quarter-block. These half-block and quarter-block subdivisions break down the scale of the extremely long blocks north of the channel and help to creating a coherent network of open space throughout the area.

Office Open Space

A sense of security in public open space should be created through ample night lighting, ease of surveillance, and other appropriate design measures. Special attention should be given to securing of pathways between parking structures and building elevator lobbies.

Landscaping of Office Open Space

The public open spaces in office blocks should be predominantly paved, with planted areas and trees to soften the hard surfaced areas. Landscape elements should be coordinated with the adjacent streetscape plant materials palette and should harmonize with the architectural character of the surrounding buildings.



Landscaped open space

Uses of Office Open Space

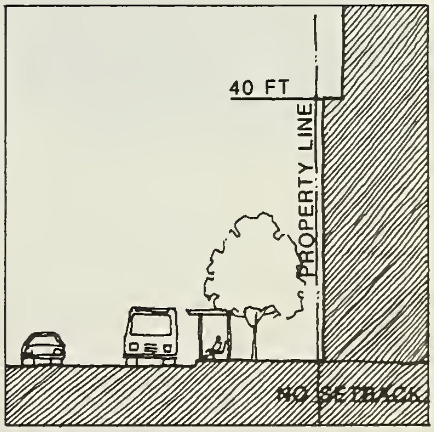
On each block the public open spaces should be designed to accommodate outdoor exhibitions, noontime entertainment, small group meetings, larger public gatherings and sunny and shaded seating. Buildings surrounding the larger public open spaces should have either primary or secondary entries onto the open spaces. (See open space guidelines in the San Francisco Downtown Plan.)

Retail in Commercial Areas

North of the Channel, retail and consumer services are appropriate uses at the street level of building and can be located at corners, mid-block passageways and quarter-block passageways where they occur. South of the Channel, retail and consumer services should be located on the first floors of buildings which are four or more stories in height.

Relation of Building Walls to Street Edges

Following San Francisco tradition, exterior building walls should align with the street grids and hold the sidewalk edge at ground level. Exceptions would be colonnades at the sidewalk edge or curb with recessed building walls behind them, and designated courtyards. Building street facades should be at the property lines for at least the first forty feet of their height. Above that height, buildings may rise vertically, step back, or otherwise vary in shape and distance from the property line. The establishment of a forty



Building wall at street

foot cornice line serves to integrate the architecture of the office areas.

Building Walls at Street Level

Building walls at street level should be open in character. Retail displays or ample fenestration of office and service commercial spaces will establish a connection between ground level spaces and the sidewalk. If the street frontages are active, then the city is more interesting and more safe. Avoid blank facades, solid walls, open parking garages and nonactive uses at the street level that produce dull and dangerous places.

Building Context

South of Market building context

South of Market building context

New buildings north of the China Basin Channel should respect the architectural context of the adjacent South of Market area. See partial listing (below) of buildings in the South of Market area that may be considered as context.

Existing buildings of the City are references for new ones. To the extent that height, scale and texture of new buildings can respond to what currently exists, the urban design of the City will be integrated over time. Conversely the constant or blatant disregard of existing building patterns will fragment the City and reduce its coherence.

Low-rise masonry buildings with large window expanses are common in the primarily industrial and commercial area directly north of the office blocks in Mission Bay. Defined bases and cornice lines, a hierarchy of window opening sizes, and punched window and door openings in thick, solid walls are characteristic of many nearby buildings. Renovation of several such industrial buildings in the South of Market and Showplace Square areas indicates the compatibility of their architectural form with contemporary uses.

A Partial List of Buildings in the Adjacent South of Market Area that may be considered as Context

150 Otis
1035 Howard
835 Howard
2 Harrison
665 6th
698 2nd
625 3rd
650 7th
700 7th
355 Fremont
101 Harrison
657 Howard
350 Townsend

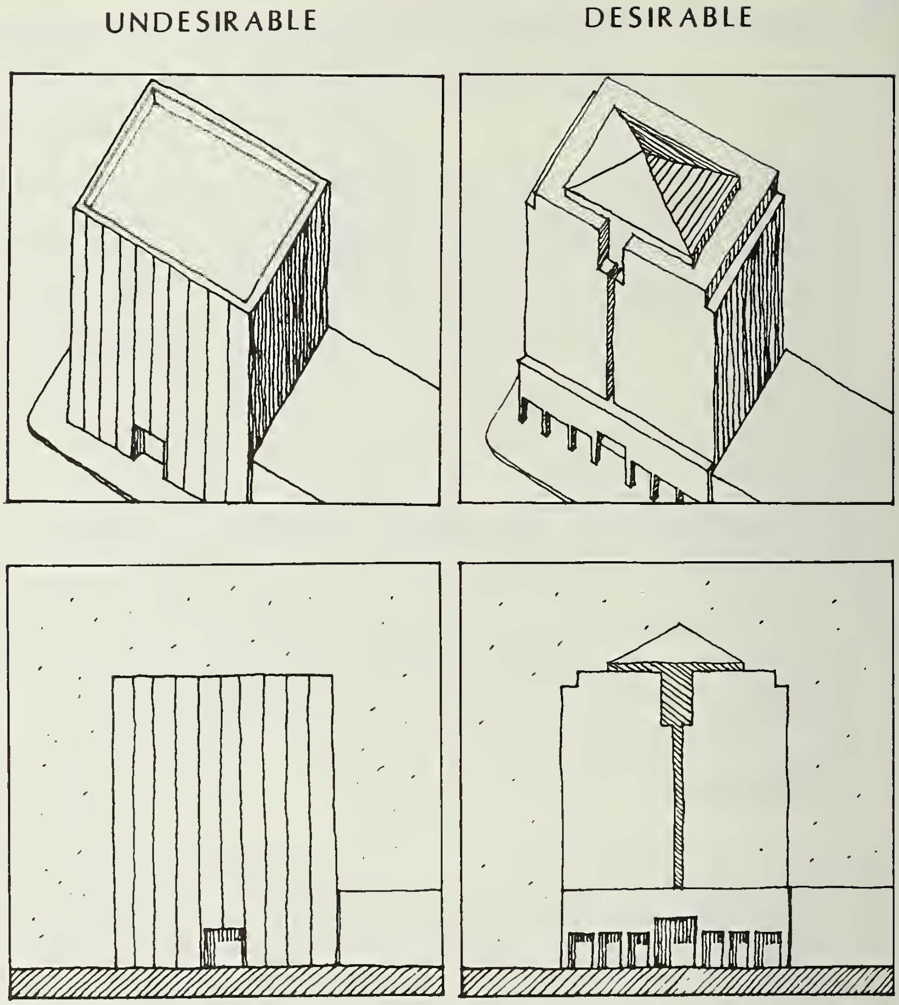
The contextual buildings identified are not intended to be used as absolute models to be mimicked, but rather as resources from which operative design principles can be extracted. The listed buildings may be considered as a hypothetical neighborhood within which any proposed office project should be considered a friendly compatible neighboring building. The designer may choose to refine the context by selecting 3 or 4 buildings from the list to serve as models for the project's immediate context. Within the list there exist a broad range of stylistic inclinations within a framework of constant attributes providing modest but effective design linkages.

South of Market building context

Base of Buildings

The bases of buildings in the office areas should be articulated as a distinct part of the building facades. The base of a building is experienced by pedestrians at close range and belongs to the streetscape not to the skyline. Thus the lower floors should be designed with color, texture and other visual interest at the pedestrian scale. This is the place for awnings, canopies, rich and articulated materials, signs, and decorative entrances.

Base of building



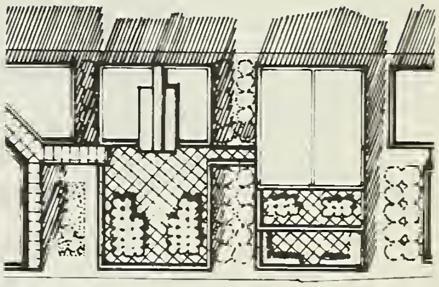
Base and Tops of Buildings

Tops of Buildings

The tops of office buildings should be articulated as distinct parts of the buildings. The tops become features of the skyline and as such require special design attention. Height exceptions should be modified to allow more volume to enclose roof top mechanical equipment and create more interesting building tops.

Views

Views of the downtown skyline, the Bay and the Bay Bridge should be maximized. Street grid view corridors should be kept unobstructed. In office blocks north of the Channel, building massing should be stepped down at mid-block to provide views over those blocks to the north.



Solar Access

Massing at Intersections

Higher building masses should be placed on street corners. Corners are appropriate for higher buildings in order to define the intersections as major nodes of the City.

Massing and Solar Access

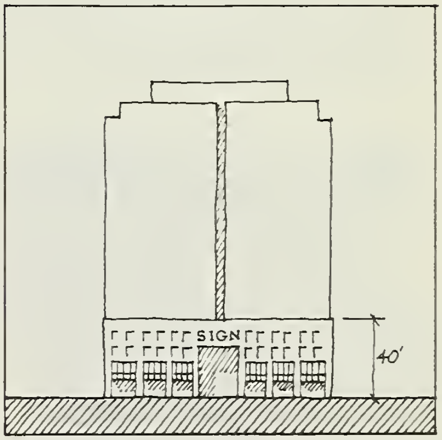
Building masses should step down at mid-block courtyards. On blocks north of the Channel, building masses should step down from the north to the south side of the block to maximize solar access for both outdoor and indoor spaces.

Building materials

Building Materials

Materials which are permanent, durable and compatible with the architectural character and history of San Francisco should be used on the facades and exterior walls of buildings.

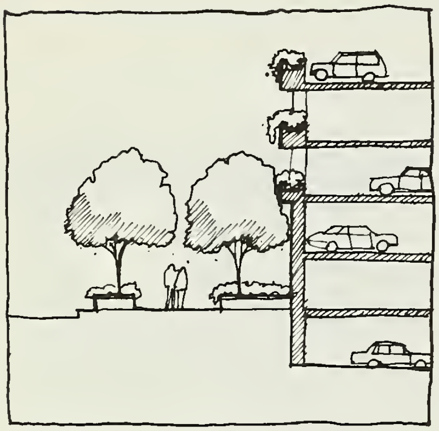
Office buildings in Mission Bay should have substance and durability in reality, as well as in appearance. Materials such as brick, stone, tile, stucco and some forms of concrete have connotations of permanence and substance. They also have a history of use in San Francisco, particularly in the South of Market area. Conversely, metal curtain wall installations, the less expensive systems in particular, often appear to have a flimsy or temporary quality, and therefore are inappropriate.



Signage

Building Signage

Signs on building facades should be limited to the first two stories or first 40 feet. Building identification signage should be integrated with the design of building entrances, and retail signage should adhere to a design program for building storefronts. (See Retail Design Guidelines for further information about signage).



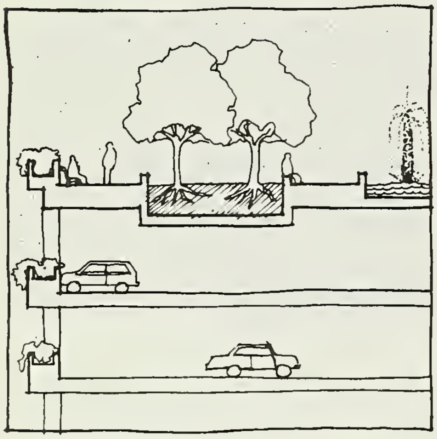
Parking structures at grade

Parking Access

Parking access should be on secondary streets and two-way alleys to minimize disruption to major traffic thoroughfares. Right-hand turns for egress will facilitate exiting at peak traffic times.

Parking Structures at Grade

As a general rule parking structures should have retail or office uses at grade. In those cases where retail is not feasible, there should be a 10 foot landscaped setback. No structures may be built below-grade in landscaped setbacks if such placement would impede the growth of trees intended to screen views of the parking structure. The walls of parking structures occurring next to freeway ramps are not subject to this guidelines. Landscaped areas on parking structures must have automatic irrigation systems.



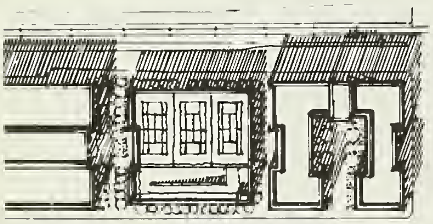
Parking structure roofs

Parking Structure Roofs

Rooftop parking levels visible from freeways and higher surrounding buildings should be treated with features such as planting, lighting, and decorative paving. Recreational uses may also be located on the top deck.

Materials of Parking Structures

The materials of parking structure facades should be of high quality and compatible with the materials of adjacent office buildings. Formal organization of parking structure facades should harmonize with that of adjacent facades.



Recreational Uses on
Parking Structure Roofs

7.4 SERVICE/LIGHT INDUSTRIAL/RESEARCH AND DEVELOPMENT

7.4.1 Intent

The intent of these design guidelines is to provide an environment amenable to businesses, workers, and neighbors in Mission Bay. Factors which can be shaped by these controls include:
(1) streetscapes, (2) the character and use of open space,
(3) linkages between residential and employment areas,
(4) microclimates, and (5) the introduction, identification, and promotion of new employment opportunities within the City.

Service/Light Industrial/Research and Development (S/LI/RD) buildings characteristically are leased to firms or individuals who are doing applied research and/or developing new products or technologies, companies that provide business services or manufacture, warehouse, or distribute products. Buildings typically found in S/LI/RD developments are two or three stories tall with high volume spaces. Mission Bay may see the development of other prototypical building forms possibly as high as six stories. In the cases where buildings are four or more stories in height, the same design standards as for offices should be applied. See Appendix for additional information concerning the general characteristics of S/LI/RD businesses and buildings and Mission Bay commercial building prototypes.

Typical S/LI/RD Building Type

Urban streetscapes are different themselves from their suburban counterparts primarily in their setbacks. San Francisco follows the typical urban model by encouraging minimal, or no front setbacks, and small side setbacks, typically less than 10 feet. Also typical of the urban streetscape is the parallel orientation of buildings, frequent openings to the sidewalk, which is nearly always located within the street right-of-way, and a more monumental entrance of more than one story. It is intended that S/LI/RD buildings work within their urban context and replicate these urban characteristics.

Open space usable to workers and the public should be provided by developers of S/LI/RD buildings as a quiet setting for interaction among the users, neighbors, and passersby. Background noise in the form of water is encouraged. Public open space should be visually accessible from the public right-of-way, but is not required to front on high traffic volume streets. If located adjacent to parking structures, special care should be given to the design of the facade of the parking garage so as to provide a pleasant backdrop to the open space.

Open Space With Water
At Building Entry

Open Space Adjacent to Sidewalk

Service Alley With Landscaping

S/LI/RD Building With punched openings and articulated massing

S/LI/RD buildings should be designed to provide an attractive face to the community, and delegate service and loading activities to the rear or sides of the buildings where they can be screened from casual view. Signage should be planned for and not be visually overwhelming. In addition, facades, when possible, should have large glass to wall ratios so as to be inviting from the street.

Private open space should face south and outdoor dining areas should try to take advantage of natural sunlight. Walkways from parking areas should be protected from inclement weather if possible, and materials should be selected which do not produce unwarranted glare.

Lease space characteristics of S/LI/RD buildings include large, tall, flexible spaces which can be rented inexpensively and are able to be subdivided to suit one or many tenants. S/LI/RD and light industrial buildings should have multiple large roll-up type doors which allows the moving of machinery required for development of new products/technologies or the light manufacture of goods. Entrepreneurial businesses are extremely rent sensitive. It should be expected that S/LI/RD and light industrial buildings will be low cost buildings with relatively few frills. Typical construction methods for buildings under 4 stories would likely include tilt-up. However, well-designed buildings with articulated bases, a hierarchy of opening sizes, and strong formal organizations of elements, should reasonably be expected.

Other issues, not covered in these guidelines, are to be considered on a case by case basis. These include trash disposal and recycling, mail service, and utility company meter accessibility.

Guidelines which appear on control maps include:

- Program by block
- Use Districts
- Building Heights

7.4.2 Guidelines

Open Space

Each building site should include a minimum of 15% on-grade public open space. This open space should be directly accessible and visible from the street, and should provide places for seating. In addition to this required open space, entries, courtyards, or passageways that are part of private development plans should be recessed to break down the scale of the long blocks.

Open Space Security

A sense of security should be created in public open spaces through ample night lighting, ease of surveillance, and other appropriate design measures. Special consideration should be afforded to parking areas, walkways, and building entrances.

Open Space Landscaping

The public open spaces in S/LI/RD areas should be predominantly planted with hard surfaces only at eating or recreational areas. Landscape elements should be coordinated with the adjacent streetscape materials palette and should be compatible in scale to surrounding developments.

Open Space Uses

The public open spaces should be designated to accommodate on each block sunny and shaded seating for small group meetings or lunchtime activities. Buildings surrounding corner public open spaces should have primary or secondary entries on the spaces.

Retail in S/LI/RD Areas

Retail, and consumer services are appropriate uses at corners or adjacent to major open spaces.

Relation of Building Walls to Street Edges

Following the San Francisco tradition, exterior walls should align with the street grids and hold the sidewalk edge at ground level. Recessed major building entrances are an exception to this guideline. This alignment provides strong definition to the street, organizes and strengthens the forms of intervening public open spaces, and enhances pedestrian activity. Pathways to major entrances should be approximately perpendicular to the sidewalk and be direct.

Building Articulation

The following are some of the ways the facades and building masses may be articulated in a typical San Francisco manner:

1. Changes in cornice height for 25% of the cornice length.
2. Changes in wall plane of more than 1 foot in depth and 2 feet or more in width.

Articulated Massing

3. Bay windows of at least 3 feet in depth.

4. Changes in color and/or material above the lst story.

5. Changes in height: stepping down at corners and/or up at entries.

6. Use of pitched roofs at entry bays.

Building Context

S/LI/RD buildings should respect the architectural context of the adjacent South of Market and Showplace areas. Low-rise, flat roofed, brick buildings with some brick detailing and large proportions of glass in punched openings are typical of better examples. Defined bases, a hierarchy of window opening sizes, and monumental entries in thick, solid walls are characteristic of many nearby buildings. Existing buildings should serve as references for the design of new S/LI/RD buildings.

Typical S.O.M. Building

The following list of buildings is intended to be used as contextual references. S/LI/RD buildings designed for Mission Bay should be compatible with these examples in a general way.

A Partial List of Buildings in
the Adjacent South of Market Area
that may be considered as Context

698 2nd
700 7th
650 7th
101 Harrison
625 3rd

Views

Blockage of views of the downtown skyline, the Bay, and the Bay Bridge should be minimized. View corridors east toward the Bay, and north toward downtown should be kept unobstructed. In addition, views of adjacent developments should be respected.

Massing Along Third Street

The floor to floor heights and cornice lines of new adjacent residential developments on Third Street should be respected.

Building Materials

Materials which are permanent, durable and compatible with the architectural character of the South of Market, should be used on the facades and exterior walls of buildings. S/LI/RD buildings may be designed with common visual characteristics to reinforce a sense of group identify.

In developments where tilt-up construction is used, the use of facing materials such as brick or tile is encouraged. Similarly, facades of high quality, architectural grade concrete broken up by the use of reveals and/or moldings are encouraged. The appearance of permanence and stability is an important quality in the design of S/LI/RD buildings.

Building Signage

Signs will be regulated by the document Neighborhood Commercial Rezoning; Department of City Planning, November, 1986.

Roofs

Because Mission Bay will be overlooked by Potrero Hill residents, roofs and mechanical equipment should be designed in an orderly manner using non-reflective, low intensity colors. Height exceptions should be modified to allow more volume to screen and enclose mechanical equipment and create more interesting building tops.

Service Access

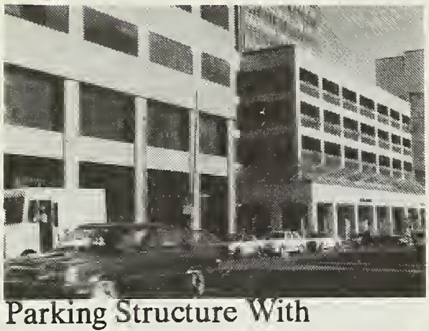
Service access should be off secondary streets or alleys. S/LI/RD buildings should have off-street service loading docks for the delivery of supplies/equipment, distribution of products, and trash removal.

Parking Access

Parking may be in lots or in parking structures. Surface parking areas should be set back a minimum of 20 feet from the street to buffer views from adjacent developments and the setback area should be treated as usable space, such as outdoor eating, seating or table games.

Parking Lot Landscape

Surface parking lots should be landscaped along the public right-of-way, between parking rows, and around the periphery of the lot and such landscaping should be automatically irrigated. Recommended landscape treatments include planted borders, trees, and shrubs. This treatment should harmonize with adjacent developments and the streetscape.



Parking Structure With Ground Floor Retail

Parking Structures at Grade

Parking structures should have retail or office uses at grade or 10 feet minimum landscaped setbacks along street frontages. No structure may be built below-grade in landscaped setbacks, if such placement would impede the growth of trees intended to screen views of the parking structure.

Parking Structure Roofs

Roofs of parking structures visible from higher surrounding buildings and the freeway should be treated to enhance their appearance. Planting, lighting, paving or the location of recreational uses on the top deck should be used to improve the appearance of the roofs of parking structures.

Materials of Parking Structures

The materials of parking structure facades should be of high quality and compatible with the materials of adjacent office buildings. Formal organization of parking structure facades should harmonize with that of adjacent facades.

7.4.3 Special Elements

7.4.3.1 Building facade west of Owens Street

Major building entry setbacks on Owens Street should occur at the southwest terminations of Mission Rock, the park lane, and Mission Creek Streets. Setbacks should consist of a landscaped plaza 40 feet wide minimum and 20 feet deep minimum. Colonnades at the entries are encouraged. Entries should have two story expressions. There should be no setbacks in other areas of the buildings.

7.4.3.2 Building facade south of Sixteenth Street

Major Building Entry

Major building entry setbacks should occur at the south terminus of Indiana and Long Bridge Streets. The plaza at the Long Bridge Terminus should be 80 feet wide and 60 feet deep from the right-of-way. Vertical landscape elements such as trees or flagpoles should be placed in a semi-circle facing Sixteenth Street. The Plaza at the terminus of Indiana Street should be 40 feet wide minimum and 20 feet deep minimum. Colonnades at entry are encouraged. Entries should have two story expressions. There should be no setbacks in other areas of the buildings.

7.4.3.3 Building facades surrounding Minnesota Park

Minnesota Park should be defined on the east by the easterly right of way of Long Bridge St. extended, on the west by the westerly right-of-way of Minnesota Street extended, to the north by the service land between Seventeenth and Sixteenth Streets, and to the south by the northerly right-of-way of Seventeenth Street. Retail uses are appropriate at the ground floor of all buildings facing the park. Building entries should front the park and have a two story expression. Colonnades surrounding the park may be appropriate if not too deep or too low.

7.5 WHOLESALE SHOWROOM

7.5.1 Intent

The intent of these design guidelines is to provide an environment suitable for the display and wholesale of furniture by adding to the convenience for design professionals and their clients contributing to the identity and form of Showplace Square. Wholesale showroom is not a presently programmed use for Mission Bay, but is included as a possible alternative future land use at Seventh and Townsend Streets.

Typical Showplace Square Brick Building

The present wholesale/showroom area is located in a former warehouse district. Most of the structures are renovated brick, concrete or wood buildings. New wholesale/showroom buildings should be designed to follow similar architectural characteristics.

As typical with most of the urban San Francisco environment, these buildings have no front setbacks and often take up full blocks. Each showroom building has a monumental entrance several stories high and a large central atrium.

Public open space is typically minimal, with most buildings providing an interior atrium or a small exterior plaza for dining or assembly.

7.5.2 Guidelines

Open Space

Each building should provide a minimum of 10% public open space, in the form of public plazas with seating, outdoor eating areas, and landscaped areas.

Open Space Security

Provide lighted entrances at buildings and at parking areas. Special effort shall be made to provide enhanced lighting effects at and around buildings in anticipation of special night events.

Open Space Landscaping

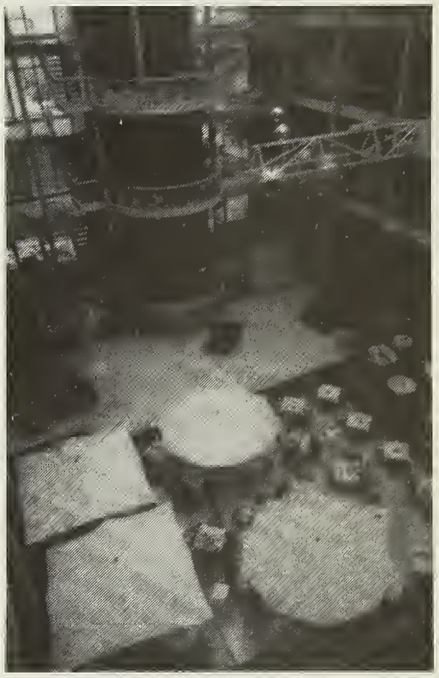
Public open space in the wholesale/showplace area may be a combination of softscape and hardscape. Landscape elements should be coordinated with the adjacent streetscape materials palette and be compatible in scale to surrounding developments.

Retail Uses

Retail uses such as restaurants, delicatessens and consumer services are appropriate and encouraged to be located at the ground level.

Building Context

Wholesale/showroom buildings should respect the architectural context of the existing Showplace Square. Low and mid rise, flat roofed, brick buildings with large expanses of glass at entries and galleries over a central atrium are typical examples. Special attention should be paid to articulation of entries and building bases. Better examples show monumental treatments and the use of special materials. See 7.3.2 Building Context for selected existing buildings to serve as neighborhood models.



Well Used Atrium

Building Materials

Steel or masonry buildings with brick facing are encouraged. Other acceptable facing materials are stucco, tile, stone, marble and granite.

Roofs

Because Mission Bay will be overlooked by adjacent South of Market buildings, roofs and mechanical equipment should be designed in an orderly manner using non-reflective, low intensity colors. Height exceptions should be modified to allow more volume to screen and enclose mechanical equipment and create more interesting building tops.

Typical Showplace Materials; Brick, Large Glass Expanses

Service Access

Truck loading access should be provided off alleys or secondary streets.

Parking

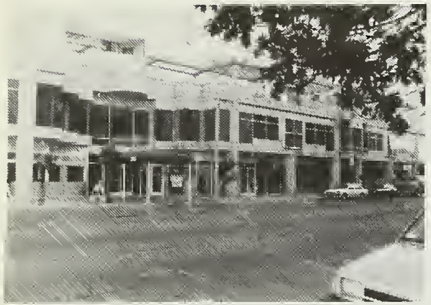
Parking for showrooms and retail should be accommodated by adequately landscaped on-grade lots or structures. A central parking structure may be constructed to accommodate parking for several buildings.

Signage

Signs will be regulated by the document Neighborhood Commercial Rezoning; Department of City Planning, November, 1986.

7.6 LARGE SCALE RETAIL

7.6.1 Intent


Large Scale Retail

Large scale stores include: supermarkets, super drug stores, and other retail stores with floorplates exceeding 20,000 square feet that will provide convenient shopping for residents of San Francisco. These stores should be permitted on Third Street. Large scale retail stores may be combined with other uses such as housing, other large scale retail, and neighborhood retail. Parking may be at grade, below grade or in parking structures.

The following guidelines provide rules and recommendations which will help to create viable and convenient shopping to serve neighborhood and citywide needs.

Other issues, not covered in these guidelines, are to be considered on a case by case basis. These include trash disposal and recycling, mail service, and utility company meter accessibility.

Guidelines which appear on control maps include:

- Program by block
- Use District
- Building heights

Retail With Arcade

7.6.2 Guidelines

Retail Storefronts

Large scale retail storefronts should be glazed for at least 50% of the ground level facade, and the glazing should be clear non-reflective.

Exterior Materials and Colors

Exterior materials and colors should be compatible with the residential neighborhood palette. Acceptable materials include brick, tile, cement plaster, stone, and terra cotta; unacceptable materials include wood siding, wood shingles.

Parking Lot Landscape

Surface parking lots should be landscaped along the public right-of-way, between parking rows, and around the periphery of the lot. Recommended landscape treatments include planted borders, trees and shrubs. This treatment should harmonize with adjacent developments and the streetscape.

Signage

Signs should be regulated as described in Neighborhood Commercial Rezoning; Department of City Planning, November, 1986

Roofs

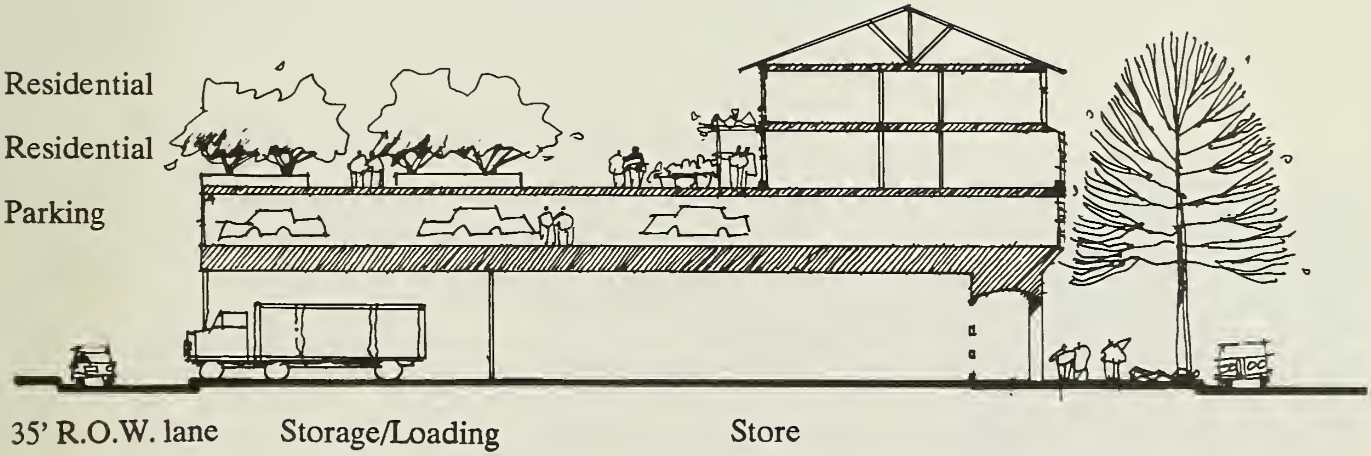
Because Mission Bay will be overlooked by Potrero Hill residents, roofs should be designed in an orderly manner using non-reflective, low intensity colors. Height exceptions should be modified to allow more volume to screen and enclose mechanical equipment and create more interesting building tops.

Service

Service access should be located on the side or rear of the building. Truck loading should be screened from residential areas and primary streets by landscaping and/or screen walls.

7.6.3 Special Elements

A supermarket would be particularly appropriate at the corner of Third and Sixteenth Streets as part of a mixed used development consisting of ground level supermarket, parking below or above grade, and 2 stories of residential units. Usable private open space would be provided on podium level.



Supermarket Section

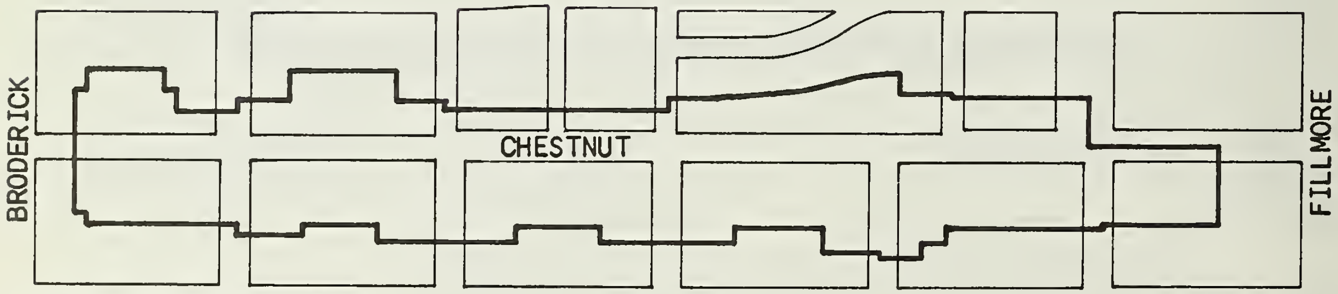
7.7 NEIGHBORHOOD RETAIL

7.7.1 Intent

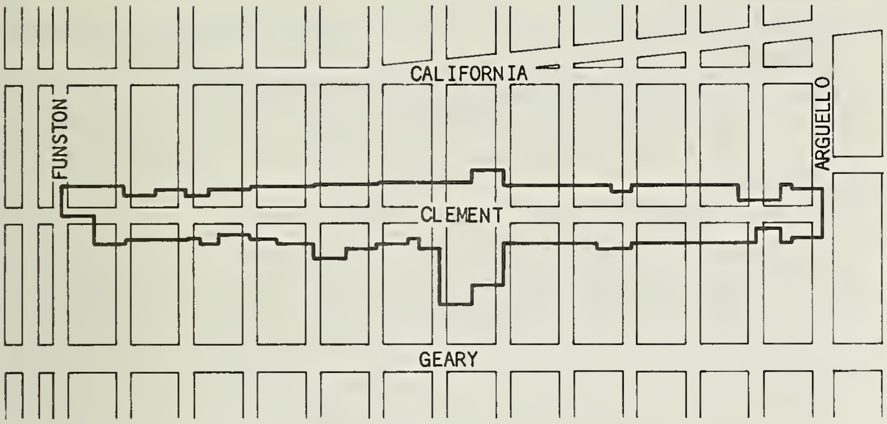
San Francisco Neighborhood Retail Street

The intent of the Retail Design Guidelines is to set rules and recommendations for neighborhood retail development which will (1) be convenient for the residents of the Mission Bay neighborhood, (2) be economically viable, (3) reinforce the central focus of the neighborhood, and (4) provide a street of special character in the neighborhood.

A neighborhood retail street, with shops creating continuous ground level frontage on both sides of the street, generates active pedestrian traffic and tends to develop a unique character for the neighborhood. The texture, pattern, and awnings and canopies of the first level of buildings should recognize the pedestrian scale of the street and help to form an active and colorful neighborhood focus. Two such streets which are thriving in San Francisco are inner Clement Street and Chestnut Street from Fillmore to Broderick. Both streets have one to four stories of housing over street level retail and have a mix of retail uses. Street trees add to the character of Chestnut, but are lacking on Clement. Parking, while a constant problem on Clement, is managed with a combination of on-street parking and a city-owned parking structure on Chestnut.



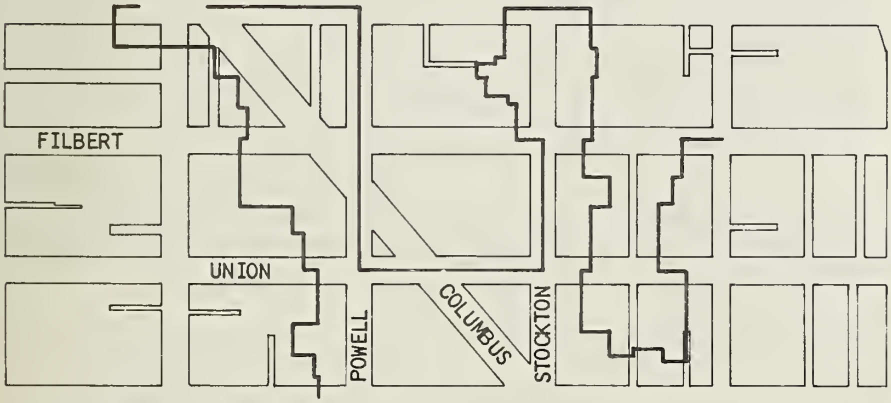
Chestnut Street Retail Area


CALIFORNIA
FUNSTON
ARGUELLO
CLEMENT
GEARY

Inner Clement Street Retail Area

Retail on Clement Street

A third retail example in San Francisco is North Beach. On Columbus Avenue at Washington Square in North Beach, a retail street, a major public open space, and a mixture of community, housing and office uses come together to create a focus for the neighborhood. Easily accessible by foot, public transportation or private vehicle, the area serves as a central meeting place in the neighborhood. Public performances and exhibitions, religious and political gatherings, and more casual interactions occur there. See Appendix for examples of Mission Bay commercial building prototypes.


FILBERT
UNION
POWELL
COLUMBUS
STOCKTON

Washington Square Area

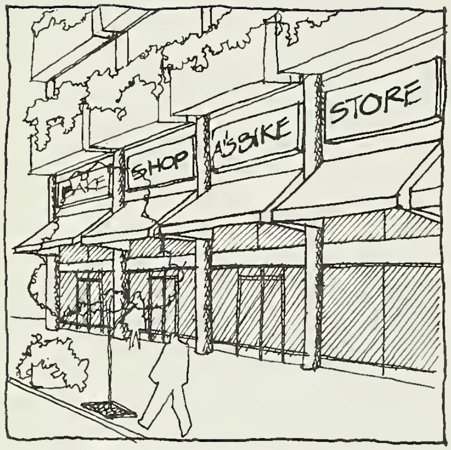
Washington Square

The following Retail Design Guidelines provide rules and recommendations which will help create viable, convenient neighborhood retail for Mission Bay. The guidelines describe means for creating the rich texture of a pedestrian retail environment which is as an integral part of a residential neighborhood.

Other issues, not covered in these guidelines, are to be considered on a case by case basis. These include trash disposal including recycling, mail service, and utility company meters accessibility.

Guidelines which appear on control maps include:

- Program by block (not set for neighborhood retail)
- Use Districts
- Building heights



Ground Floor Retail Facades

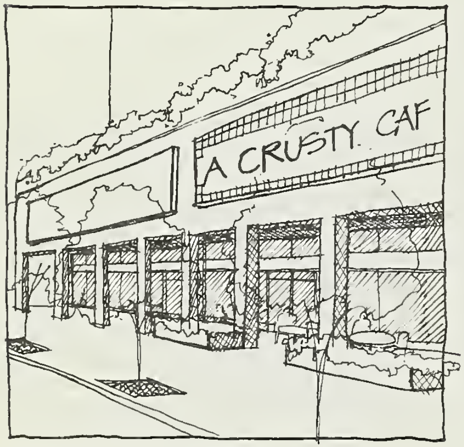
7.7.2 Guidelines

Ground Floor Facades

Ground floor facades of buildings incorporating retail uses should be differentiated from upper stories, allowing for flexibility and change of retail tenants. Retail features which make up the ground floor facade include: retail storefronts; awnings and canopies; sign bands; and cornices.

Retail Storefronts

Retail storefronts should be at least seventy-five percent glazing and the glazing should be untinted and nonreflective. At least fifty percent of the storefront should be at the building or property line (exceptions are retail colonnades and outdoor activity areas), and any recessed portions may not be set back more than fifteen feet. The optimum recommended storefront width is twenty-five feet or less, which is in keeping with traditional San Francisco lot sizes. Larger retail users may occur; however, shop entrances should be at intervals not to exceed twenty-five feet.



Retail Colonnade

See Housing Design Guidelines 7.2.3.2 for building articulation requirements covering 45 degree corner entrances along Long Bridge Street.

Outdoor Activity Area

Outdoor areas in commercial districts should be regulated as described in Neighborhood Commercial Rezoning; Department of City Planning, November, 1986.

Awnings and Canopies

Awnings and canopies should be regulated as described in Neighborhood Commercial Rezoning; Department of City Planning, November, 1986.

Exterior Materials and Colors

Exterior materials for ground floor retail facades should be matte and in the middle range of light to dark in color value. The materials should not be reflective, bright white or dark gray to black in color value. Exceptions include glass, plexiglas or other plastics used in storefronts, awnings or canopies, and tile or stone when used as an accent or base for storefronts. Acceptable materials include brick, tile, cement plaster, stone, and terra cotta; unacceptable materials include wood siding, wood shingles, flat metal panels, and cement plaster substitutes.

Signage

Signs should be regulated as described in Neighborhood Commercial Rezoning; Department of City Planning, November, 1986.

Service

Service for ground story retail in office on other buildings should be accommodated off-street within the buildings. Parking demand for retail clusters, shopping streets and squares should be satisfied with on-street spaces where possible. Off-street parking should be provided adjacent to shopping streets and squares, where on-street parking is insufficient. (For additional requirements, refer to the City Planning Code, Sections 150, 153-157.)

Retail at Ground Story of Housing

See Housing Design Guidelines, 7.2.3

Retail at Ground Story of Office

See Office Design Guidelines, 7.3.

7.8 COMMUNITY AND CULTURAL FACILITIES

7.8.1 Intent

This category includes facilities for police, fire, education, child care, performing arts, recreation, community center, library, health and social services, and churches.

7.8.2 Guidelines

Community facilities are grouped into three categories with regulations as follows:

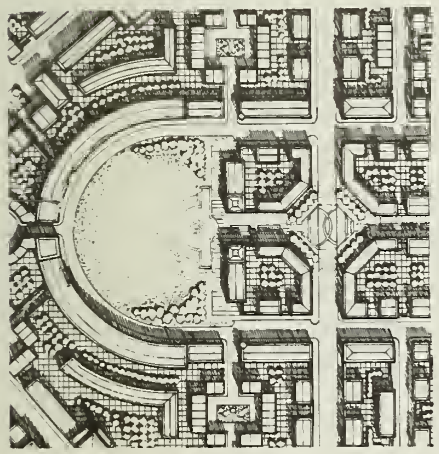
1. Scattered child care, health and social services located in housing, neighborhood or large scale retail, office, or S/LI/RD buildings should be designed to conform to those particular building guidelines and the special requirements of the service being provided.

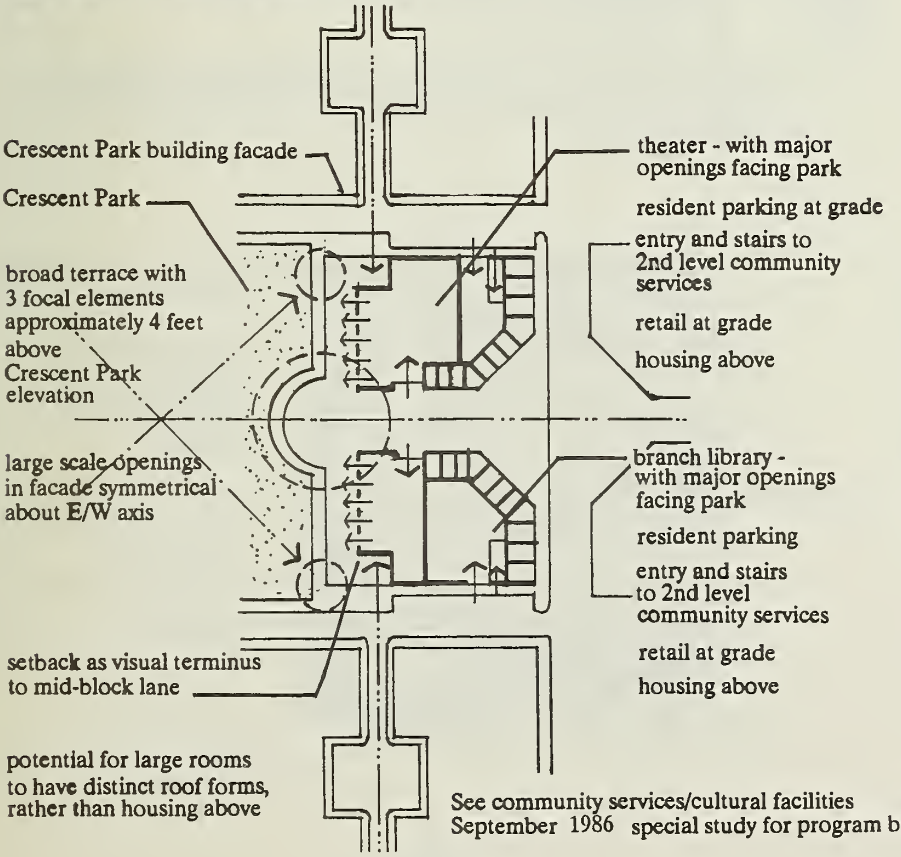
2. Churches may be located as a conditional use on a portion of any block south of the channel that does not front on the major open spaces including the wetlands, Channel edge, Bay edge, Crescent Park, axial E/W open space from Crescent Park to the Bay, and the triangular and central plazas on the retail street. These areas are excluded to preserve the opportunity for unified facade controls. Churches need not conform to guidelines and may be considered as special focal visual elements.

3. The community center, public safety and recreation complex and public school are treated as site specific special elements with general design criteria described in the following section.

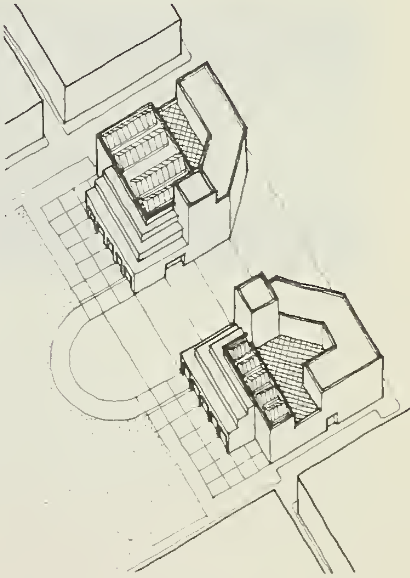
7.8.3 Special Elements

1. The community/cultural center made up of two mixed use blocks is intended as a visual focus of both Long Bridge Street and Crescent Park. The housing program for these blocks should be considered soft and changeable to suit the design intent.

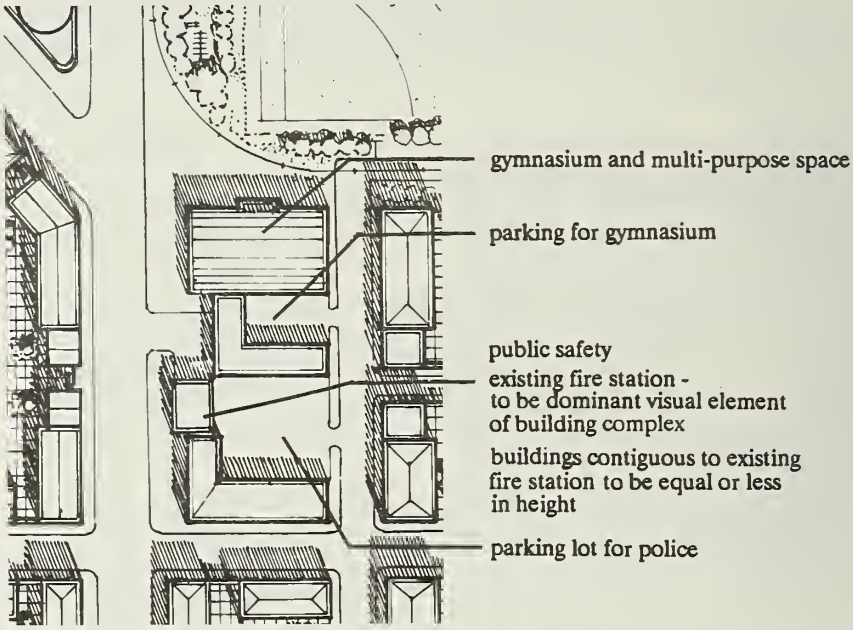



Crescent Park building facade
Crescent Park
broad terrace with 3 focal elements approximately 4 feet above Crescent Park elevation
large scale openings in facade symmetrical about E/W axis
setback as visual terminus to mid-block lane
potential for large rooms to have distinct roof forms, rather than housing above
theater - with major openings facing park
resident parking at grade
entry and stairs to 2nd level community services
retail at grade
housing above
branch library - with major openings facing park
resident parking
entry and stairs to 2nd level community services
retail at grade
housing above

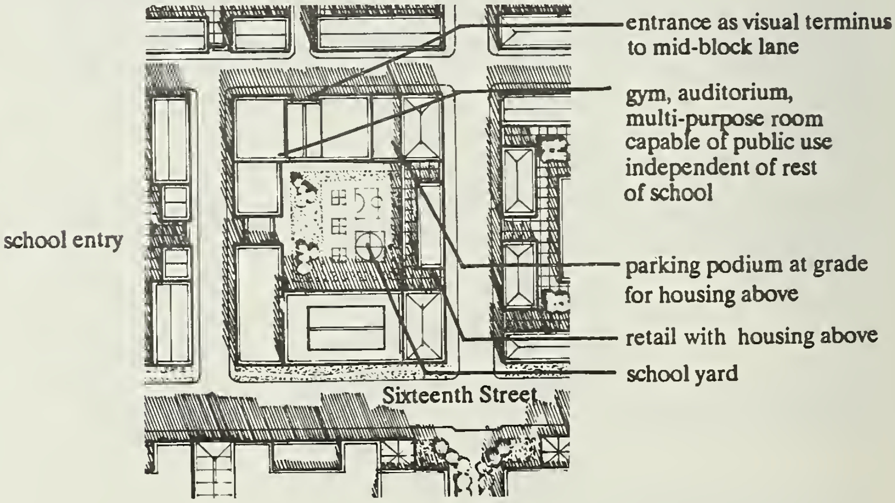
See community services/cultural facilities September 1986 special study for program basis



2. The public safety and recreation complex should be designed with an addition to the existing fire station. The station facade should be preserved to the extent feasible.


gymnasium and multi-purpose space
parking for gymnasium
public safety
existing fire station - to be dominant visual element of building complex
buildings contiguous to existing fire station to be equal or less in height
parking lot for police

3. The public school is not presently programmed. Regardless of the eventual program, the following design conditions should be met.


entrance as visual terminus to mid-block lane
gym, auditorium, multi-purpose room capable of public use independent of rest of school
school entry
parking podium at grade for housing above
retail with housing above
school yard
Sixteenth Street

7.9 HOTEL

7.9.1 Intent

The hotel is planned for the half-block west of Fourth Street fronting the north side of the Channel.

7.9.2 Guidelines

The hotel should comply with the office guidelines 7.3

7.9.3 Special Elements

The hotel should comply with the north of channel building profile special element requirements (7.2.4.2). Some hotel off-street parking is assumed on the residential block immediately west of the hotel.

7.10 BALLPARK

Design guidelines for ballpark are not provided in this document. They are the subject of a separate planning effort.

7.11 OPEN SPACE DESIGN GUIDELINES

7.11.1 General Intent

The main planning objectives of Mission Bay open space system are:

- to acknowledge the two most dominant open space features at Mission Bay--China Basin Channel and San Francisco Bay--and the linkages between them.
- to provide a distinct overall Mission Bay open space character.

The landscaped street pattern in combination with the open space network extends towards the Channel and Bay. Main open spaces such as Fountain Park and the Mission Bay Green orient to San Francisco Bay while continuous plazas, walkways and greens focus on China Basin Channel. The Wetlands Habitat and Mission Point Park respond directly to both. The Mission Bay Green, with the Wetlands area, reclaims the City's lost waterfront and creates the potential for extending the citywide waterfront open space system.

Internally, the connection between Channel and Bay is established by a pedestrian open space system including planted corridors linking Crescent Park, Long Bridge Plaza and Fountain Park. This is augmented by the landscaped street system.

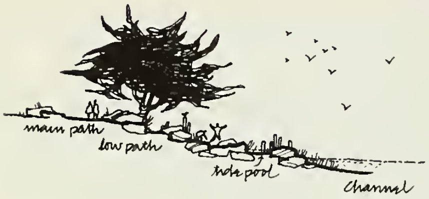
The open space character of Mission Bay responds to the overall plan form in that it is formal at its center and less formal at its periphery. Open space, planting and paving patterns are formal and geometric at Crescent Park and Long Bridge Plaza (the commercial/cultural heart) and become freer and more natural as they approach the Channel and Bay.

7.11.2 China Basin Channel Frontage

Intent

The China Basin Channel is a unique landmark in the City of San Francisco and the Mission Bay project area. This navigable channel, marked by two historic steel truss drawbridges, is the last remaining vestige of the original Mission Bay, which covered most of the project site. It supports an active houseboat community and a variety of shore and water birds as well as a pier-island with which Blanche's gallery/restaurant, a local "institution". The

Natural Edge



Natural Edge

Natural Rock Steps

Hard Surfaced Edge

Channel is a strong focal point and form-giver to the Mission Bay project and represents a literal and symbolic tie with San Francisco Bay. The treatment of its edges can provide an attractive separation between the major office, hotel and residential uses on the north side of the Channel and the residential community to the south, while becoming a unifying seam which visually binds the diverse uses along its banks in a strong urban statement.

The intent of the open space along the Channel is threefold. It must (1) establish an outdoor continuity or context for the overall Channel environment; (2) provide the recreational and functional amenities associated with adjacent uses; and (3) visually integrate the architectural forms withe the linear, dynamic character of the Channel. The edge treatments are critical factors in establishing this transition.

The plan proposes a structural pattern of paving and terraces which enables a variety of hard and soft edge treatments to be introduced within it. The pattern is dominant along the harder urban edges and more recessive in areas where the edge is soft and natural. Hard edges, along more public, hotel, office, retail areas, step down to the water's edge in a composition of geometric terraces, contained planters, sitting ledges and walkways. Softer edges incorporate meandering walkways, rock rip-rap, boulders, wood pilings and natural earth banks and plantings within the structural pattern.

Because the Channel is tidal, care must be taken with the way materials are used. Softer edges respond better in areas visible at low-tide levels and may include tide pools and marsh vegetation. Hard, architectural surfaces will need more frequent maintenance and may encourage greater use of vertical walls, parapets or railings. Main plazas and walkways should all be placed above mean higher high tide.

7.11.2.1 China Basin Channel Frontage

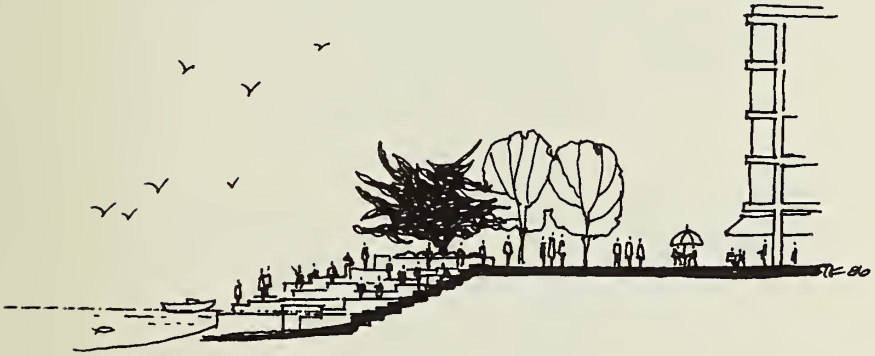
A. Northern Edge--from Fourth to Owens Streets

This space is urban in character, with hard edges responsive to adjacent office, residential and commercial uses and to its southern (sunny) orientation.

It will tend to be city-wide serving from Fourth to Fifth Streets and neighborhood serving from Fifth Street west.

Predominant uses: These include strolling, sitting, sunning, eating, public gatherings, exhibits and festivals. The Channel Plaza space could easily accommodate gatherings of over 1000 people.

Character elements: These include substantial use of paving, steps, terraces, bollards/railings and seating. Edge configurations should respond to adjacent architecture. The edge at the Channel Plaza on the north side should extend northward to allow channel waters to penetrate into the plaza space. A substantial length of the paved upper plaza level, approximately 400 feet from the Fifth Street axis east, should maintain a minimum width of 70 feet. Lower terraces provide an "amphitheater to the sun".



Planting: Planting should be largely contained at grade or raised planters. Where the plazas and large open space parcels meet the streets, the formal street tree planting patterns should be blended into the open space planting design. Basically, the open space planting is informal with the primary character generated by the trees which will occupy the space. Because of the dominance of pavement, the plant material should serve as a contrasting/softening element that climbs, weeps and hangs over the strong horizontal lines of the plazas. The lower ground plane should be predominantly evergreen, while the trees forming the strong vertical statements should be mixed evergreens and deciduous. Trees on the selected list have distinct character; many are multi-trunked. Color displays will add further dimension to the overall scheme. All planting configurations should recognize the important views from surrounding buildings.

Planting palette:

Character varies from plaza and pavement landscapes to lawn and more natural/informal statements. All planted areas should be primarily evergreen with some deciduous trees. All subgroups within the China Basin Channel frontage should employ the following palette:

Trees:

- Cupaniopsis anacardiodes
- Camphora officinarium
- Arbutus menjezii
- Pyrus kawakami
- Melaleuca leucadendra
- Melaleuca liniariifolia
- Myoporum laetum
- Maytenus boaria
- Eucalyptus (sp.)
- Liquidardar styraciflua
- Pyrus calleryana
- Crataegus (sp.)
- Ceratonia siliqua
- Pittosporum (sp.)
- Sophora japonica
- Fraxinus (sp.)
- Grevillea robusta
- Tristania conferta
- Populus

Shrubs:

- Acacia Longifolia
- Arbutus unedo
- Carissa grandiflora
- Escallonia fradesii
- Grevillea noelli
- Griselinia littoralis
- Pittosporum tobira
- Prunus laurocerasus
- Raphiolepsis (sp.)
- Trachelospermum jasminoides

Ground Cover, Vines and Hanging Plants:

- Cotoneaster dammeri
- Fragaria chiloensis
- Rosmarinus officianalis
- Bougainuillea (sp.)
- Clematis
- Hedera helix
- Parthenocissus
- Creeping Fig
- Orange tecomaria capensis
- Mandevilla suaveolens
- Solandra guttata

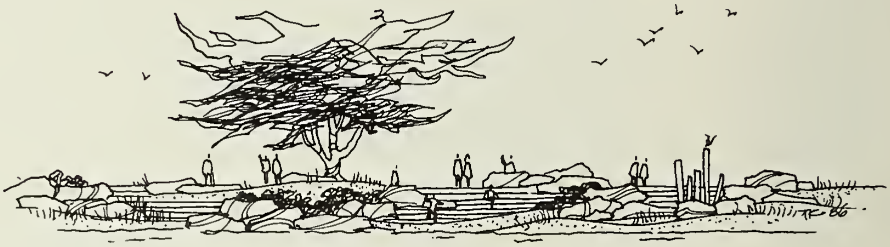
Furniture: Stationary seating should be designed integral with planters and terraces. Large areas of plaza should remain open to accommodate movable seating, exhibits and displays. Trash receptacles should also be fixed and integrated within planter terrace and architectural features. A drinking fountain should be provided.

Lighting: Area lighting should be low-level standards of a pedestrian scale. Pathway and corridor lighting should be integrated, where possible, with planters, railings, bollards and architectural features. Uplighting of tree canopies is encouraged for path lighting as well as effect.

B. Southern Edge--from Fifth Street axis to Third Street.

The open space strip will vary in width from 100 to 125 feet, from building face to water's edge, and approximately twice that much at the plaza space midway between Fourth and Fifth Streets. Its Channel edges should be natural and soft while the paved areas should be set back and responsive to adjacent residential and commercial edges. It will be both a neighborhood and citywide serving open space.

Predominant uses: These should include strolling, sitting, eating and public gatherings.



soft edge treatment

Character elements, plantings, furniture and lighting should be similar to the northern edge. Trees in grassed/groundcovered areas should be on-grade and informal in pattern. While the illustrative plan indicates concrete or masonry paving, wood may also be considered for decked areas over Channel edge waters.

The Channel Plaza area (both sides of the Channel between Fourth and Fifth Streets) should be perceived as one space, joined by similar paving patterns and materials, the proposed pedestrian bridge and the Channel itself, as well as its activities.

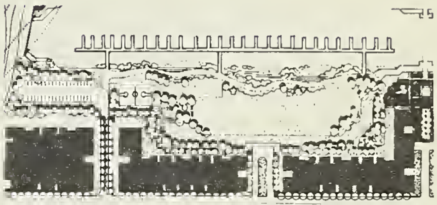
The water's edge should be soft (rock rip-rap terraces, earth banks and a meandering walkway) within the paved framework which steps back toward the building faces. Wood decking may be particularly appropriate between Third and Fourth Streets.

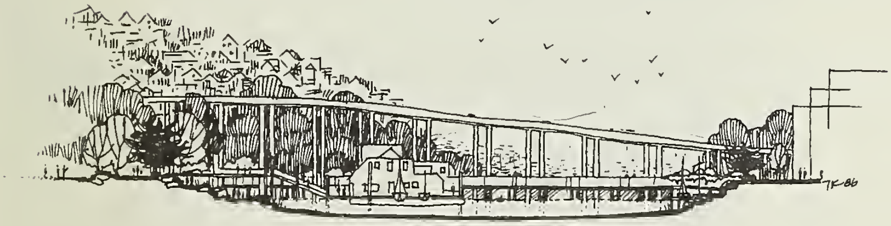
The present use of the pier off the Fourth Street Bridge, currently occupied by Blanche's Gallery/Restaurant is a good one for the area and, whether retained, rehabilitated or redesigned, should be encouraged.

The proposed pedestrian bridge located on the Fifth Street axis extends the pedestrian corridor directly across the Channel. It will require relocation of the easternmost portion of the houseboat docks. It must draw, swing or slide sufficient to allow navigation to continue.

C. Southern Edge, from Fifth Street axis to Owens Street

This space should be more natural in character than the other Channel areas. It should have softer edges and be predominantly green. The open space strip varies in width from 120 to 240 feet from building to water's edge and includes a large recreational green space of nearly 2.5 acres, with playground, totlot and basketball court. The Channel edges should be soft and natural in appearance, including rock rip-rap, boulders, wood pilings and stepped terraces, tide pools, meandering walkways, earth banks and marsh vegetation. It will be primarily neighborhood serving.


Channel Edge At Houseboats



China Basin Channel - looking west

Predominant uses: These should include active and passive recreational uses. Parking at a 1 to 1 ratio should be provided for the 55 member harbor association with 40 surface spaces provided at the west edge near Owens and 15 spaces within one building podium fronting on the east end of the large recreational open space. Storage lockers should be provided in conjunction with the surface parking area. Open spaces are to be designed in a manner that is inviting to the public at large. Public spaces should not be designed to appear to be the private domain of the harbor association community. The green area should include a turfstone strip along the buildings for emergency vehicle access and another for vehicle access to the houseboats' center gangway.

Planting: Trees should be planted in the natural grade at edges, surrounding the open green, playground/tot lot and court games, for containment of activity, for space delineation and for buffering from adjacent residential uses. Random tree masses at the playground/tot lot contain associated seating areas, benches and picnic tables and combine evergreen and deciduous trees.

Planting in this zone should embody a similar palette of plant material to that used on the northern side of the channel, but the lines on this side should be formed by earth grading and the planting design. Plant material should be primarily evergreen with trees both clustered in groves and set in isolated patterns, all recognizing the important views from the surrounding buildings. Marsh vegetation and salt-tolerant shrubs should be used within the soft, natural Channel edge.

Planting Palette: The character varies from plaza and pavement landscapes to lawn and softer treatments.

Furniture: Seating and picnic tables of wood are preferred over metal. Furniture groupings are particularly desirable in association with tot lots. Trash receptacles should be fixed and integrated within the surrounding design context. A stepped drinking fountain should be provided in the picnic area.

Lighting: Area lighting should be low level standards of a pedestrian scale. Pathway and corridor lighting should be integrated where possible with plantings. Uplighting of tree canopies is encouraged for path lighting as well as effect.

Playground lighting and tot lot lighting is not desirable beyond that needed to provide safety to passersby.

While the parking area adjacent to this open space is not included in the open space use category, low foot candle levels of lighting should be provided for safety. Directional or canopied lighting are preferred to avoid undesirable intrusion into residences.

7.11.2.2 Wetlands Habitat/Mission Point Park/Mission Bay Fields Area

Intent:

The general character of this 18.25 acre area should be soft and green. It should be predominantly a city wide serving open space with a broad range of active and passive recreational uses in additional to a valuable wetlands habitat amenity. Its overall continuity should be provided by similar plant varieties in natural appearing arrangements.

A. Wetlands Habitat

The habitat on this site requires a minimum of 13 acres of the parcel, adjacent to China Basin.

Intent: The design should be a response, first and foremost, to providing the most natural, healthful and protective environment possible for the kinds of wildlife presently associated with Mission Creek (herons, egrets, grebes, cormorants, etc.) and any additional varieties which are native to the Bay environment. Beyond that, facilities should be provided for human observation, education and participation with the natural environment.

Wetlands Habitat

Predominant uses: The permanent wetlands habitat shoud offer environmental/wildlife education facilities and exhibits, a marshland nature trail, strolling, sitting, and viewing.

Character elements: The natural habitat should be set within a densely planted (treed) buffer frame of berms in proximity to China Basin and the Bay waterfront. Human access must be highly controlled, with marked trails, 2nd railings or fences, if necessary.

Facilities: Three shelters should contain exhibits and educational displays on the kinds of wildlife observable from each. Seating at various observation and viewing points should be provided.

Natural Edge

Planting shoud include native marsh vegetation within the habitat and salt-tolerant uplands vegetation. Dense trees and plantings on the surrounding berms should be integrated with the street species along

Third Street, but planted in groupings more natural (less urban) than elsewhere along Third Street.

Planting Palette: Salt-tolerant trees and shrubs for surrounding upland areas and berms.

Trees:

- Eucalyptus (sp.)
- Myoporum laetum
- Populus (sp.)
- Salix (sp.)
- Melaleuca leucadendra

Shrubs:

- Acacia longifolia
- Acacia verticillata
- Arbutus unedo
- Baccharis pilularis
- Carissa
- Coprosma
- Echium
- Escallonia
- Leptospermum
- Raphiolepsis

Marsh Vegetation - within wetlands:

- Spartina foliosa
- Salicornia (sp.)
- Distichlis spicata
- Scirpus robustus
- Cotula coronopifolia
- Jaumea carnosa
- Grindelia humilus

Furniture: Benches, facilities, and railings should be wood and permanent.

Lighting: Lighting is not desirable.

B. Mission Point Park

This is a two-acre site at the northeastern corner of the plan area where the Channel meets the Bay.

Character elements: Mission Point Park should be a soft, green open space associated with the wetlands habitat and oriented to the dramatic views over San Francisco Bay. Its hard waterfront edge should be the culmination of the hard edged pattern used along the Channel, and should be terraced to allow seating at a variety of levels.

The park facilities shoud include a playground, tot lot, open green and picnic tables set among informal tree masses. Fishing can occur along the China Basin edge.

Furniture: movable wooden picnic tables and benches and fixed trash receptacles. Fixed wood seat benches should be placed along the fishing edge.

Lighting: Lighting should be low level standard lighting along the edges and uplighting of tree canopies, mounted within the trees.

Planting: Trees should be a combination of deciduous and evergreen and extend the character established within the heavily treed berm areas around the wetlands.

Planting Palette:

Trees:

- Cupaniopsis anacardiodes
- Cupressus macrocarpa
- Melaleuca leucadendra
- Melaleuca liniariifolia
- Melaleuca stypheloides
- Eucalyptus (sp.)
- Myoporum laetum
- Camphora officinarium
- Pinus (sp.)
- Schinus (sp.)
- Agonis flexuosa

Shrubs:

- Acacia (sp.)
- Cotoneaster (sp.)
- Escallonia fradesii
- Prunus laurocerasus

- Pittosporum (sp.)
- Raphiolepsis (sp.)
- Coprosma baueri
- Griselinia littoralis

Ground Cover, Vines and Hanging Plants:

- Hedera canariensis
- Hedera helix
- Grasses (sp.)

C. Mission Bay Fields

Intent: South of the Wetlands and separated by a heavily treed/bermed buffer zone will be the major recreational precinct of Mission Bay. While it should be also neighborhood serving, the 3.25 acre field area should be accessible to the citywide community.

Predominant uses:

- 1 football/soccer field
- 2 softball diamonds (overlying the football/soccer field)
- 4 tennis courts

As the space develops southeastward toward the Mission Bay Green, additional uses should include a playground/tot lot and associated sitting areas, within groupings of shade trees. Parking facilities should be nearby and also serve the community facilities complex associated with the existing firehouse area. Public restrooms should be provided in this area, along with a drinking fountain.

In addition to the large turfed area, plantings and lighting should be similar to that for Mission Point Park. Lighting for field events should be provided with fixtures selected which minimize light spillages on adjacent parcels.

7.11.2.3 Mission Bay Green

Intent:

The Mission Bay Green should be a large linear open green space (over 3.5 acres) created between a new Mission Bay Street and China Basin Street. It must accommodate the

Belt Railroad line (much of which is outside the current Plan area) for active Port uses. Similarly, China Basin Street must be maintained as a limited access road serving Port uses (see plan). The open space will be defined on the west by an architectural edge and a street, and on the east by the waterfront. The green should be largely city-wide serving.

Predominant uses: Active recreation (court games, a playground and tot lot) open-field games, jogging, frisbee, kites and passive activities such as strolling, sunning, picnics, recreation, etc. Public restrooms and drinking fountains should be included.

Character elements: Substantial open green, orientation to the Bay, recreational facilities (court games, play equipment, tot lot) toward the ends, and a water feature nearer the center, should be the key elements of the Green. The water feature should be a visual extension of the Fountain Park water feature, just across Mission Bay Street. (See Special Elements, Section 7.2.10.3).

Planting: Street trees should border the western edge of Mission Bay Street. Plantings within the "green" should be informal and sparse, predominantly in masses around playgrounds and picnic areas at the northern and southern ends. A mixture of deciduous and evergreen, the informal tree masses should tie the Mission Bay Green with the athletic field and wetlands habitat areas to the north.

Informal Tree Masses

Trees used within this open space should also serve to highlight the water feature and link across Mission Bay Street into the Fountain Park and east/west open space corridor toward the neighborhood center.

Planting Palette:

Trees:

- Cupaniopsis anacardiodes
- Cupressus macrocarpa
- Melaleuca leucadendra
- Melaleuca liniariifolia
- Melaleuca stypheloides
- Eucalyptus (sp.)
- Myoporum laetum
- Camphora officinarium
- Pinus (sp.)

- Schinus (sp.)
- Agonis flexuosa

Shrubs:

- Acacia (sp.)
- Cotoneaster (sp.)
- Escallonia fradesii
- Prunus laurocerasus
- Pittosporum (sp.)
- Raphiolepsis (sp.)
- Coprosma Baueri
- Griselinia littoralis

Ground Cover, Vines and Hanging Plants:

- Hedera canariensis
- Hedera helix
- Grasses (sp.)
- Bougainvillia

Furniture: This major Bayfront open space should be open green, with furniture confined to benches, picnic tables and game tables associated with the tot lot and quiet activity areas. Trash receptacles should be fixed. Drinking fountains should be associated with restrooms and quiet use areas.

Lighting: Except for lighting of water features, general lighting of the open space may not be necessary. Edge lighting is desirable along Mission Bay Street. This should be low level standard lighting extending to include the tree mass areas to the north and south.

Uplighting of tree canopies should be encouraged, particularly in the quiet use areas.

Court game lighting should be provided with fixtures selected which minimize light spillage on adjacent parcels.

Special lighting of pools, falls, etc. will be described in the Special Elements section.

7.11.2.4 Central East/West Open Space Corridor - From Crescent Park to Mission Bay Green

Intent:

The Central East/West corridor should be an open space spine defined largely by retail uses west of Third Street. A strong architectural edge should provide the form of the space which varies in width from 60 feet to 200 feet. Most of the corridor east of Third Street will be surrounded by a one-way loop road.

Water should be a consistent theme along the corridor. A formal fountain at Crescent Park should terminate the western end and a major, participatory water feature should culminate at Fountain Park to the east. Between these should be a series of smaller, linear, canal-like waterways. These may be individual water elements, which appear as one.

The corridor should be a neighborhood serving open space.

The axial character of the space and its placement within the overall plan suggests a formal landscape elements composition centered on either the space itself as a landscaped park, the individual freshwater elements or a combination of the two. In any case, the open space features should vary with the progressively increasing site width and will culminate at a major water feature at the Bay end. It should serve as a connecting corridor to the Bay, a visual landscape feature for the adjacent residences, and an armature for quiet pedestrian uses.

Predominant uses: Use should include strolling, sitting, jogging, table games, sunning, watching the water features, etc.

Character elements: These should include linear containment of space, water features, urban character with planting, quiet pockets, and passive recreation. Paving should be consistent throughout the corridor and responsive (in material) to water feature containment -- predominantly concrete.

Planting: The planting throughout the east/west corridor should provide a continuity from Crescent Park to the Bay. This integrated statement may be achieved through a palette or arrangement of trees or, at times, both. Within the continuity, it is also desirable to have change and variety. These differences occur in how the planting and ground level planes respond to the character and uses which surround them. Examples include the use of formal plantings in formal spaces, informal clustering in large open spaces, absence of middle story shrubs in plaza areas (for visual porosity), and dense shrub plantings in residential areas (for privacy and diversity).

Planting Palette:

The planting palette has been selected for appearance, durability in this environment, diversity in character as contrasted to the street plantings, and year-round interest. Most varieties are broadleaf evergreen. The trees have great flexibility in how they can be combined and many can be single or multi-trunked, allowing for additional flexibility in responding to formal and informal situations.

Trees:

- Cupaniopsis anacardiodes
- Camphora officinarium
- Pyrus kawakami
- Melaleuca leucadendra
- Melaleuca liniariifolia
- Myoporum laetum
- Maytenus boaria
- Eucalyptus (sp.)
- Liquidardar styraciflua
- Pyrus calleryana
- Crataegus (sp.)

Shrubs:

- Acacia Longifolia
- Arbutus unedo
- Carissa grandiflora
- Escallonia fradesii
- Grevillea noelli
- Griselinia littoralis
- Pittosporum tobira
- Prunus laurocerasus
- Raphiolepsis (sp.)
- Trachelospermum jasminoides

Ground Cover, Vines and Hanging Plants:

- Cotoneaster dammeri
- Rosmarinus officianalis
- Bougainuillea (sp.)
- Clematis
- Hedera canariensis
- Hedera helix
- Mandevilla suaveolens
- Solandra guttata

Furniture: Benches, seating and game tables should be fixed and, where applicable, incorporated within planting/water feature edges. Concrete with wood seats is preferred. Trash receptacles should be fixed and of a similar design vocabulary. Include at least one drinking fountain per block.

Lighting: Low level standard path and seating area lighting should be provided. Uplighting of tree canopies is encouraged. Lighting of water features to be incorporated within the features themselves.

Central East/West Corridor - from 3rd Street to Long Bridge Plaza and west to the Crescent Park open space, by subgroup.

Long Bridge Plaza:

Long Bridge Plaza should be the symbolic center of the community -- functionally and geographically. It should be a point of importance within the overall open space network. Framed by a strong architectural edge, the character of the contained space should be considered in response to the pedestrian crossing on Long Bridge Street.

The paving pattern of the corridor should be expanded at the crossing, reinforcing the plaza's form and suggesting pedestrian dominance of the space, and narrows again at the other side to the new corridor width. Similarly, the water feature should expand to acknowledge the plaza, as it continues along the corridor (see plan).

Long Bridge Plaza should be a neighborhood-serving open space.

Predominant uses: Uses include sitting, public gatherings, festivals, eating, strolling.

Character elements: The geometric form of the space about two axes, its predominant paving, center pools/water features and the penetration of Long Bridge Street should comprise the identifying character of Long Bridge Plaza.

Planting: The planting design for this space should meet two important objectives. It should maintain and reinforce the continuity between Crescent Park and Mission Bay Green, and it should respond to the plaza space itself. This suggests that the street trees along Long Bridge Street should not be carried through the plaza. They should stop at the outsides of the crosswalks (as shown on the illustrative plan) to acknowledge the entire plaza space as well as the dominance of the east/west pedestrian corridor.

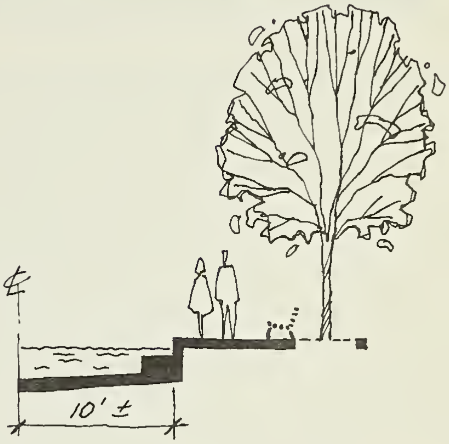
While any planting scheme considered should be formal in arrangement, it should not attempt to fill the space but leave it open (as a space), and should maintain the axial view from Crescent Park to the Bay. There are a variety of ways to achieve it. The space may be accentuated by symmetrically lining the outer edges with a single row of trees. Further strength may be achieved by adding concentric rows of the same specie. Trees may also be arranged in formal geometric bosques in each quadrant. Any arrangement should allow people to choose between sun or shade, or to be comfortable alone or in a large group.

The predominant trees should be light in texture and rich in visual interest. Maytenus boaria, Melaleuca leucadendra or Cupaniopsis anacardiodes would be excellent choices.

Furniture: These should be fixed and arranged formally in response to the space. Seating and trash receptacles should be integrated into special site elements (water/landscape features) and be consistent with surrounding materials and paving. Wood seats are preferred. Generally, large plaza spaces should be maintained open for movable furniture, exhibits, gatherings, etc.

Lighting: Lighting levels should be congruent with streetlighting levels along the retail street with particular focus on the water feature space of the plaza. Uplighting of tree canopies is encouraged and would add considerable dimension to the plaza, particularly during holiday seasons.

Long Bridge Plaza to Crescent Park Leg:



This is the short leg of the corridor, approximately 80 feet wide and 150 feet long. It should be a neighborhood serving space defined by an architectural edge with retail and community facilities, including a community theater, at the pedestrian level.

Predominant Uses: These should include sitting, strolling, public gatherings, sidewalk cafe space, eating, exhibits, street performers, retail fairs and theater spill-out; a "celebration space".

Character Elements: This will be an urban plaza, responsive to architectural edges, a canal-like water element on axis, formal paving pattern and activity.

The canal-like water feature should be essentially a linear water element, approximately 20 feet wide or 10 feet to center line, set within grade or slightly above, in a fully contained concrete channel. Several edge configurations are possible which allow seating or steps along the water's edge.

Design of the edges should respond to adjacent paving patterns and should be consistent or harmonious for all segments from Crescent Park to Fountain Park. Water feature segments may be functionally combined within one pumping system or may be mechanically individual, however, the overall appearance should be as if they are one continuous feature. Lighting should be incorporated below the water surface, within the channel.

Planting: Trees should be in a formal arrangement which reinforces the linear urban pattern and or a similar or harmonious specie to those in Long Bridge Plaza. Planting should be at grade with grates.

Furniture: Benches and trash receptacles should be fixed and integrated within the tree and paving patterns. Wood seats are preferred. Additional seating may be incorporated within the canal-like water feature edges.

Lighting: A formal arrangement of low level standards is preferred. Space lighting for special events may be mounted on adjacent buildings.

Note: The character and treatment of this space might extend along the walkway fronting the western faces of the same buildings, opposite Crescent Park.

Long Bridge Plaza to Third Street leg:

This leg will be similar in almost all ways to the one described above and its treatment should be similar. Its narrower width (approximately 60 feet) will require a change in how the continuous paving pattern is integrated and in tree placement (see plan).

Central East/West Corridor - from 3rd Street east to the Mission Bay Green at Mission Bay street, by subgroup:

Third Street to Fountain Park:

This will be a short space, approximately 90 feet wide by 100 feet long that should serve as a small but important transition element between the urban, retail-oriented corridor to the west and the softer park space to the east. It will be defined by its architectural edges with retail uses on the pedestrian level, by Third Street and by a short segment of the one-way loop road which surrounds Fountain Park. It should include a continuation link of the canal-like water feature from the west. The treatment of this space, in all ways, should be similar to that of the corridor west of 3rd Street.

Fountain Park:

Just across the one-way loop road, the east/west corridor will terminate its previous (to the west) character and begins to respond to a new space form, greater width, different uses and a softer, less formal image. Approximately 80 feet east of the loop road, the canal-like water feature should terminate in a slightly wider pool, and the paving pattern should give way to open green and the formal tree arrangement should end.

The architectural edge which defines the Fountain Park space will be residential and uses within the space should be recreational, including a large (over half an acre) open green, a major participatory water feature and surrounding plaza space with seating and table games, and informal tree arrangements. The forms of these elements should be consistently integrated and respond to the form of the overall space containment, opening out to the east to greet the Bay. By penetrating the water feature to the east, beneath Mission Bay Street, visually and perhaps functionally, it joins Mission Bay Green. The water feature is described more fully in the section on Special Elements.

Predominant Uses: These should include open field sports, frisbee, jogging, strolling, eating, table games, sitting, playing on the terraces and walkways within the water feature, etc.

Character Elements: The space itself, the open green and the water features should be dominant. Paving around the feature should be concrete, to integrate with and literally become the fountain. Soft green edges and informal tree masses should surround the space.

Planting Palette:

Trees:

- Cupaniopsis anacardiodes
- Cupressus macrocarpa
- Melaleuca leucadendra
- Melaleuca linariifolia
- Melaleuca styphelioides
- Eucalyptus (sp.)
- Myoporum laetum
- Camphora officinarium
- Pinus (sp.)
- Schinus (sp.)
- Agonis flexuosa

Shrubs:

- Acacia (sp.)
- Arbutus unedo
- Cotoneaster (sp.)
- Escallonia (sp.)
- Prunus laurocerasus
- Gaultheria shallon
- Pittosporum (sp.)
- Rapholepsis (sp.)
- Coprosma baueri
- Griselinia littoralis

Ground Covers:

- Cotoneaster
- Hedera canariensis
- Hedera helix
- Grasses (sp.)

Furniture: Benches, game tables and trash receptacles should be fixed and integrated. Wood seats are preferred. Additional seating should be provided within the fountain structure, built into its terraces, steps and ledges. A stepped drinking fountain should be provided.

Lighting: Plaza lighting should include low level standards on fewer high-pole, multi-lamped fixtures with visors to prevent light intrusion into adjacent residences. Up-lighting of tree canopies is encouraged, particularly in quiet use areas and for effect. Fountain lighting should be incorporated within the feature itself.

7.11.2.5 Crescent Park

Intent:

This should the “signature” open space park within the Mission Bay community, approximately 3 acres in size and powerful in form, defined by a crescent shaped architectural edge (residential) and community facilities along the eastern edge.

Predominant uses: These should include unstructured, open green play space, active play (pick-up sports, frisbee, kites, etc.), picnics, strolling, sitting, jogging, playground, tot lot, and a major special element which incorporates water, landscape, amphitheater and seating terraces.

Character elements: The powerful crescent form of the space will be reinforced by an allee of palms along the surrounding street. The size of the open green space itself will be dominant. The fountain should be the focal feature (see Special Element section for description).

Planting: This should be largely turf throughout with shade tree groupings defining two areas, one on each side of the water feature/amphitheater special element, which is centered near the western edge of the crescent. These groupings should be associated with a tot lot and playground area and shelter quiet sitting areas. They also extend and enhance the character of the special feature.

Planting palette:

Trees:

- Cupaniopsis anacardiodes
- Camphora officinarium
- Pyrus kawakami
- Melaleuca leucadendra
- Melaleuca liniariifolia
- Myoporum laetum
- Maytenus boaria
- Eucalyptus (sp.)
- Liquidardar styraciflua
- Pyrus calleryana
- Crataegus (sp.)

Shrubs:

- Acacia longifolia
- Arbutus unedo
- Carissa grandiflora
- Escallonia fradesii
- Grevillea noelli
- Griselinia littoralis
- Pittosporum tobira
- Prunus laurocerasus
- Raphiolepsis (sp.)
- Trachelospermum jasminoides

Ground Cover, Vines and Hanging Plants:

- Cotoneaster dammeri
- Rosmarinus officianalis
- Bougainuillea (sp.)
- Clematis
- Hedera canariensis
- Hedera helix
- Mandevilla suaveolens
- Solandra guttata

Furniture: Furniture within Crescent Park should be associated with the tot lot and playground areas and the shade tree groupings. Wood is preferred for seats and tables and may be in combination with concrete, as an extension of the special element. Trash receptacles should be fixed and a stepped drinking fountain should be included at the tot lot site and playground area.

Lighting: Lighting generally should be provided on the periphery, within the streetscape edge. Within the shade tree groupings, the preference is for uplighting of tree canopies from within the trees, to discourage vandalism. General area lighting of the open green is optional and, if considered, must incorporate visors or shields to prevent intrusion into adjacent residences. Lighting of the special element should be integrated within the feature itself.

7.11.2.6 Triangle Plaza (north end of Long Bridge Street)

Intent:

Triangle Plaza should be an active, urban social space defined by intersecting neighborhood streets and entertainment retail uses (cafes, restaurants, bars, etc.) within a residential precinct. While it should be urban in character, it should have an intimate scale and serves citywide visitors as well as the neighborhood. It's should be a place to meet.

Predominant uses: These should include strolling, sitting, eating/drinking. Triangle Plaza should be a festive spot, day and night and an anchor at the northern end of the retail corridor.

Character elements: It should be characterized by a sense of containment and "crossroads", its intimate scale and apparent activity, paved hardscape but informal planting and flexible space for movable furniture. It should employ color, texture and friendly materials. A perceived ability to change to suit a variety of uses is important. A focal element (water or landscape feature) is encouraged.

This should be an activity node along a visitor-oriented pedestrian way between the Channel and the Bay. It also should be a destination point.

Planting: Tree planting within the Plaza, of a variety in contrast to the retail corridor street trees which will continue through the space along the street, should be informal and massed. Three or four large specimen shade trees would make a strong positive contribution to the Plaza.

Tree Palette:

- Liquidambar stryraciflua
- Pyrus callerlana 'Bradfordi'
- Fraxinous pennsylvanica (sp.)
- Quercus (sp.)
- Sequoia semper virens
- Melaleuca (sp.)
- Pyrus kawakami
- Schinus (sp.)
- Cupanicopsis anacardiodes

Furniture: Seating should be integrated with landscape/water feature and fixed benches near the street edges. Generally the space should remain open to accommodate movable cafe furniture. Trash receptacles should be fixed. A public drinking fountain should be provided.

Lighting: Low level pedestrian scale standards are preferred. Uplighting of shade tree mass from within trees is encouraged. Water feature lighting should be integrated within the feature.

7.11.2.7 Minnesota Park

Intent:

Nearly one acre in size, Minnesota Park should be the central focal space of a proposed campus arrangement of individual Service/Light Industrial/Research and Development uses. It should be neighborhood serving.

Predominant uses: These should include walking, sitting, eating (a lunchtime spot), and sunning. The space will be large enough for active recreational uses and serves as a visual element around which the Service/Light Industrial/Research and Development uses are structured.

Character elements: Identifying features should include the rectangular containment of the large open space and a significant participatory water feature. The park should incorporate a diagonal pedestrian movement (joining Minnesota Street and the retail plaza at the southern end of Long Bridge Street) and a soft green space with informal groupings of shade trees.

Tree Palette:

- Liquidambar stryraciflua
- Pyrus calleryana 'Bradford'
- Fraxinus pennsylvanica (var.)
- Quercus (sp.)
- Sequoia sempervirens
- Melaleuca (sp.)
- Pyrus kawakami
- Schinus (sp.)
- Cupaniopsis anacardioides

Furniture: Furniture should be comprised of movable cafe furniture associated with bordering cafes and delis. Trash receptacles and at least one drinking fountain should be provided.

Lighting: General lighting should be provided by surrounding street lighting. Additional lighting is optional. Uplighting of shade tree canopies is preferred.

Note: The above S/LI/RD complex assumes an arrangement of individual enterprises. If the entire site is utilized by a single enterprise, that enterprise should be allowed to develop its own overall complex plan provided that its concentrated open space component is at least as large as that proposed above.

7.11.2.8 Lane Parks and Mini-Parks

These include public open spaces within residential blocks, associated with alleys, and small pocket parks at corners or along streets within residential sectors.

A. Lane Parks - associated with residential block alleys

These will be approximately one-tenth acre open spaces surrounded by slow moving, one-way alleys. They should be largely relief open spaces which provide visual green space, tend to retain through-traffic use, and should support a variety of uses such as:

- enclosed tot lot/play areas
- quiet garden areas with seating
- areas for washing cars or doing maintenance tasks.

Planting/Furniture/Lighting: To suit the proposed use.

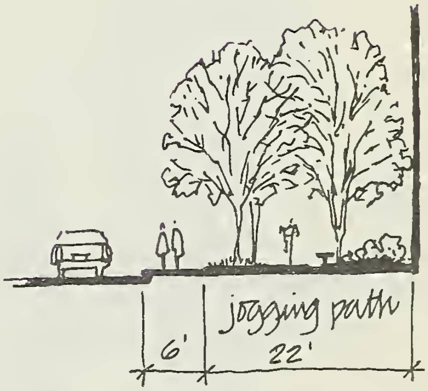
B. Mini/Pocket Parks - along residential streets (including Park North and Park South)

These will be small green spaces which should provide a visual green open space amenity associated with residential entries or prelude spaces for through pedestrian corridors. While they will be largely visual, in addition to plantings, they should provide pockets for sitting, walking or tot lots.

Planting/Furniture/Lighting: To respond to the character of the adjacent streetscape. Highlight plantings or ornamentals could be introduced as visual/color accents to the streetscape.

7.11.2.9 Landscaped/Recreational Edge Strip, along the inboard edge of Owens and Sixteenth Streets

This will be a 28 foot wide edge strip which should include a 6 foot wide public sidewalk. The remaining 22 foot width should be developed as a richly landscaped strip with continuous jogging path and occasional seating woven within the informal tree patterns. Potentially linking the Channel open space with the Bayfront, this landscaped band will be an important component to the overall open space network and completes the neighborhoodwide jogging circuit. At the same time, its green width and strength of planting should reinforce the residential edge of the community and should emphasize the Sixteenth Street corridor as a major arterial street to Mission Bay.

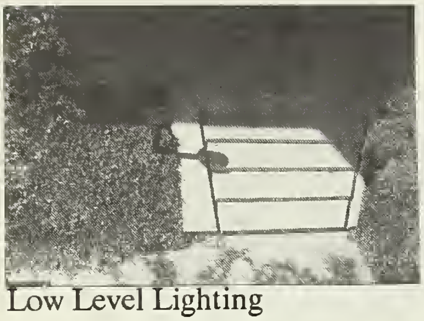


Green Strip Along Owens and 16th Streets

Planting palette:

Trees:

- Eucalyptus (sp.)
  Includes Eucalyptus citriodora
  Eucalyptus ficifolia
  Eucalyptus sideroxylon
- Pinus (sp.)
- Melaleuca (sp.)
- Liquidambar styraciflua
- Gleditsia triacanthos



Low Level Lighting

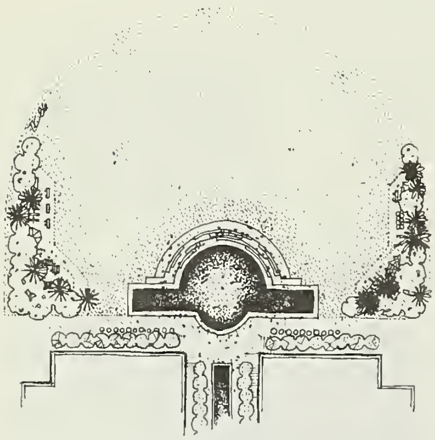
Furniture: Furniture should include fixed, wood benches, approximately every 100 yards throughout the strip.

Lighting: Generally provided by regular street lighting. Jogging path lighting might include low, ground level fixtures.

7.11.2.10 Pedestrian Corridors

These will be narrow (approximately 30 feet wide) corridors defined by residential edges up to six stories high. They join Crescent Park with mini-parks at Sixth Street and Mission Rock Street, with a 16 foot paved surface (for emergency vehicle access) within plantings of low shrubs and randomly placed trees. Configurations can respond to changes in architectural expressions. Trees should be a combination of evergreen and deciduous, preferably multi-stemmed varieties.

Benches may be placed in pocket spaces along the way. Lighting should be low level, pedestrian scale standards or building-mounted, of a character consistent throughout the Mission Bay residential precincts.

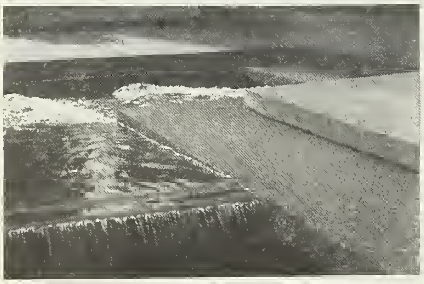


Crescent Park water feature

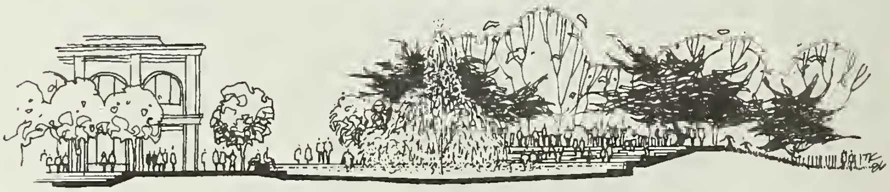
7.11.3 Special Elements

7.11.3.1 Water Feature at Crescent Park

A fountain with upward sprays (jets) will be the focal feature of Crescent Park and the western terminus of the central east/west open space corridor. The fountain should have a basically formal composition of seating terraces focused on a large pool and its jet display. The pool itself will be contained by an 18 inch high seat/wall, which becomes the lower terrace of the amphitheater area. Steps will be of a variety of heights and sizes to accommodate everyone. They will rise up approximately 4 1/2 feet to the top ledge which will backed by a grassed berm from the Crescent Park green.



Water Stairs



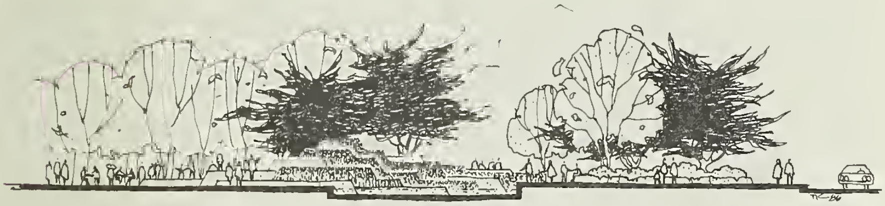
← to S.F Bay Crescent Park water feature — looking south

7.11.3.2 Water Feature at Fountain Park

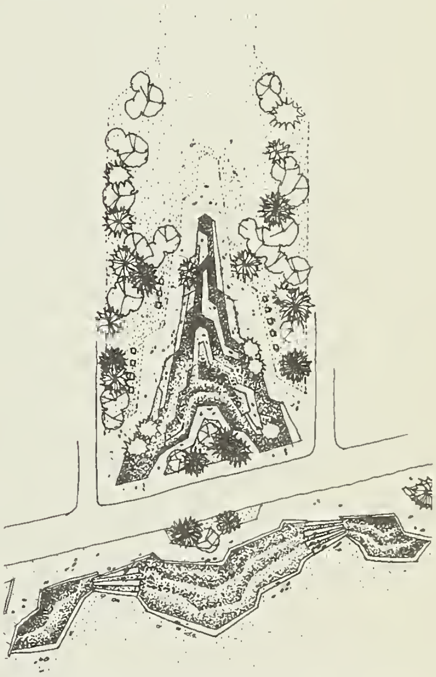
This will be the major water feature in Mission Bay. Literally a "water park", it will be the eastern terminus of the east/west open space corridor and should greet the San Francisco Bayfront as it visually penetrates beneath Mission Bay Street to embrace the green.

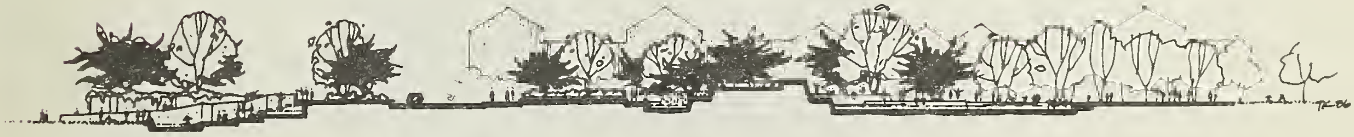
The fountain will be a multi-terraced concrete, participatory water feature consisting of waterfalls, wet ledges, dry terraces, plantings and pools within which children of all ages may climb, wade, splash, sit and play.

Possible Fountain Character


Fountain Park — looking north

Water sources, some 10 or 12 feet above grade, will fall, cascade and flow over terraced configurations to the pools below. The visual intent is for the fountain to appear to continue to flow beneath Mission Rock Street to a final composition of low terraces and pools at Mission Bay Green. It may, in fact, do this through culverts beneath the street, or it could functionally be two separate water features.

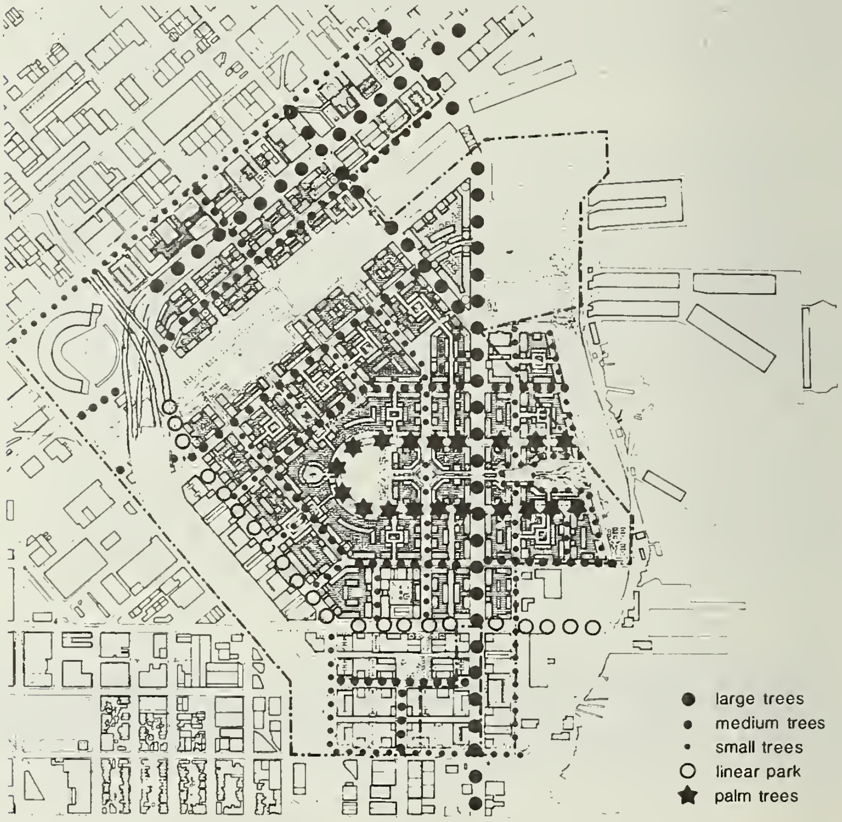

Fountain Park / M.B. Green water feature



7.12 STREET GUIDELINES FOR MISSION BAY

7.12.1 Intent

The circulation system is intended to orient and guide movement in an orderly, sequential manner. This can be done in part by creating a dominant visual theme for all major streets which will enhance and enrich the Mission Bay experience. A strong and lasting image created on major streets is important for continuity as well as for creating a memorable experience. Temporary names have been given to all the streets for planning convenience. The major streets in Mission Bay are: Third, Fourth, King, Owens, Sixteenth, Long Bridge, Park Crescent, Channel and Mission Bay Streets. For these streets, which will be shared by citywide and neighborhood users, dominant themes are recommended. The visual distinction of major streets will also increase the sense of place in the neighborhood. There will be a hierarchy of intersections which will be compatible with the visual hierarchy of the streets.

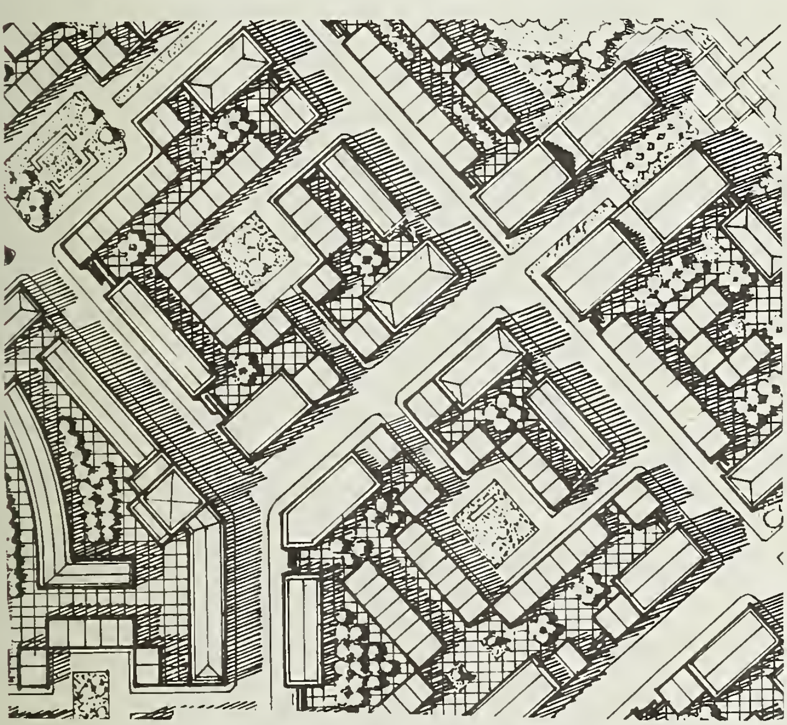


Planting Concept

7.12.2 Guidelines

Building Setbacks

Buildings define the edges of the streets. Urban squares, courtyard spaces off the street and spaces within arcaded buildings will read as extensions of the street space. No buildings will be allowed within the rights-of-ways, except as permitted as a housing encroachment, see 7.2. Store displays, outdoor dining areas, overhead awnings, signs, trellises and balconies are encouraged subject to individual project design review. The building setback line should establish a continuous edge along the street. See Building Guidelines for specific requirements.



Continuous Building Frontage at Edge of Sidewalk

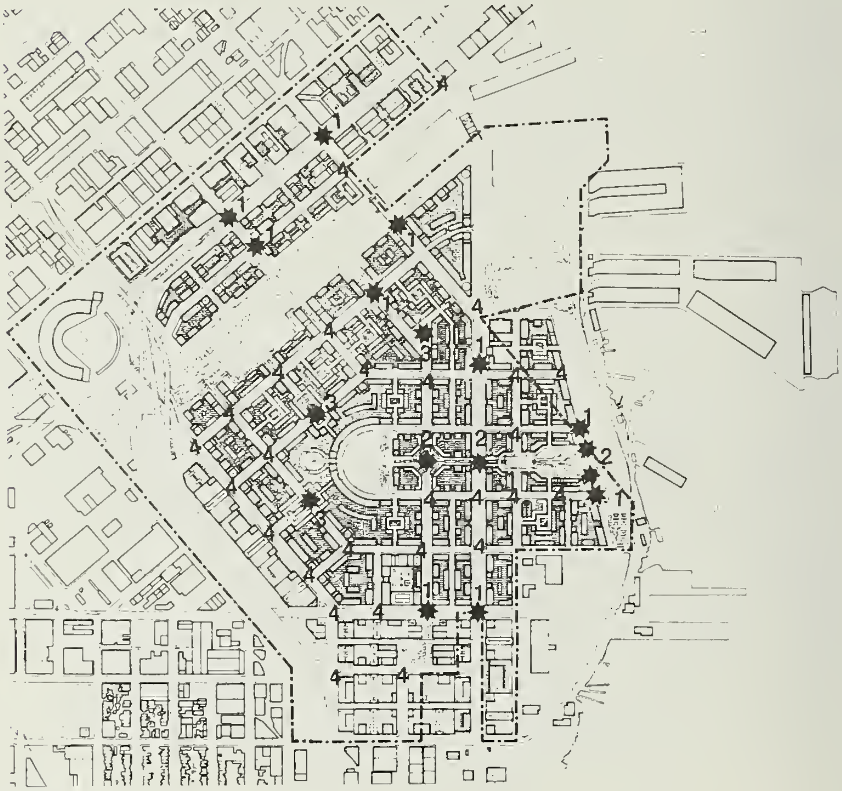
Service Access

Service access should be off secondary streets or mid-block lanes.

Intersections

The hierarchy of intersections, as defined by the treatment of crosswalks, should always provide clear preference for pedestrians. The intersection treatment should be compatible with that of the pedestrian open space system. Intersections follow four basic patterns:

1. Crosswalk with special paving
2. Special paving crosswalk at mid-block crossing (with signalization as appropriate)
3. Pedestrian oriented lanes with special paving.
4. Typical crosswalk at corner intersection

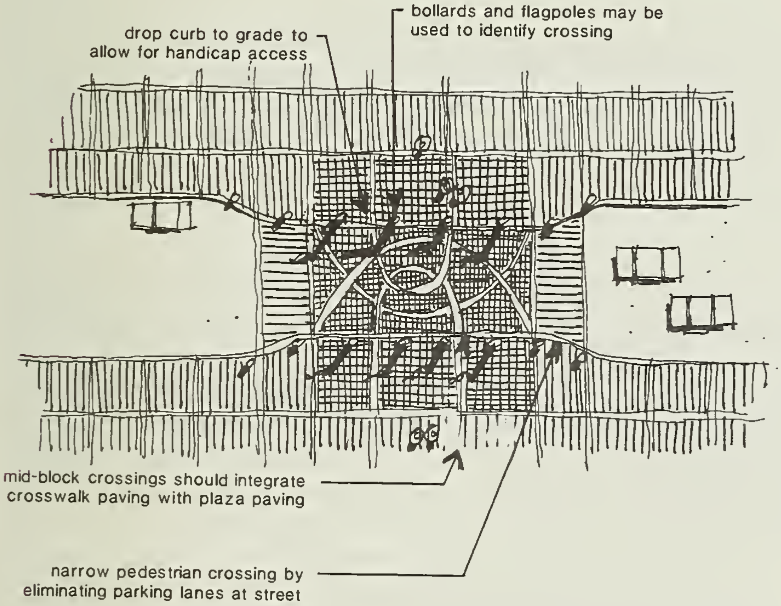


Massing at Intersections

Higher building masses should be placed at street corners which help defines the intersections as major nodes; see Building Heights Control Plan.

Street Floor Intent

The street floor is an important visual feature for the pedestrian. It should separate and minimize vehicular conflict, provide preference to the pedestrians at crosswalks, provide a pedestrian circulation path system along the street network, and provide "landmark or image" identity where necessary. It should allow for a variety of the street level activity to occur and create "special" activity nodes within the street right of way.


drop curb to grade to allow for handicap access
bollards and flagpoles may be used to identify crossing
mid-block crossings should integrate crosswalk paving with plaza paving
narrow pedestrian crossing by eliminating parking lanes at street

Mid-block Crossings

Sidewalks

Sidewalks should be typically twelve feet along all primary and secondary streets and 7 feet along mid-block lanes. Typical sidewalks should follow the City of San Francisco code requirements. Most sidewalks should begin at the curb. The exceptions will be the east side of Owens Street and north side of Sixteenth Street. Special paving should be permitted especially at building entries and should be visually integrated with the design of the sidewalk. Sidewalk elevations should be maintained at driveway crossings. In housing areas, 3 foot encroachments are allowed for planters and bay windows and 4 foot encroachments for entry steps are allowed at 12 foot sidewalks. One foot encroachments are allowed for the same conditions at 7 foot mid-block lane sidewalks. Six inch encroachments are allowed in all cases for sills, frames, belt courses and similar architectural embellishments.

Access for the Physically Disabled

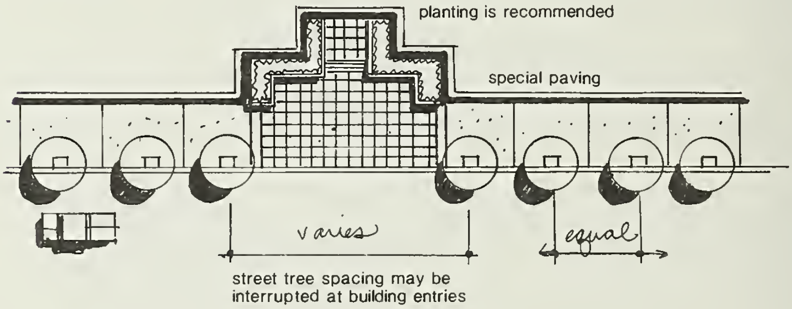
All sidewalks should allow for adequate handicap access and should be subject to city code. At mid-block crossings, dropped curbs with bollards are encouraged to facilitate handicapped and other pedestrian users. Refer to the 'Downtown Plan', Pedestrian Improvements Standards and Guidelines for further treatment of crosswalks.

Utility Covers

In general, utility covers should be located in a four foot strip adjacent to the curb. In special paving areas all utility covers within the street right-of-way may be designed to visually relate to the paving design.

Accent Paving

Special accent pacing should occur at all major pedestrian crossings along the open space spine and is encouraged at building entries especially along the neighborhood retail street. Where plazas extend to the street edge an adequate paving transition should occur with the adjacent sidewalk paving. Major crosswalks should incorporate special paving to facilitate the pedestrian. All other crosswalks should be striped according to city code. Refer to the 'Downtown Plan', Pedestrian Improvement Standards and Guidelines for further paving treatment descriptions.



Bike Lanes

Bike lanes should be signed but not striped on streets designated as bike lanes. These streets include Berry Street, Third Street, Fourth Street, and Sixteenth Street.

Street Furniture

Street furniture within the street right-of-way should include bollards, trash receptacles, street signs, bus shelters, some dining furniture from streetside cafes, street lighting and street tree cut outs. Other street furniture such as planter pots and walls should be located at building entrances and relate to the architectural context.

Street Corners

Street corners should not be cluttered with excess furniture such as too many newsstands and trash receptacles. Location of receptacles and newsstands should facilitate and not interfere with pedestrian use. Refer to the 'Downtown Plan', Pedestrian Improvement Standards and Guidelines for more specific treatment at corners.

Curb Bulbs

Curb bulbs for bus loading should be considered as a design feature of certain intersections. Streets with wider lanes which are intended to ease the movement of transit vehicles are the most compatible with the concept of bus loading zones at curb bulbs.

Bus Shelters

Bus shelters should occur at corners wherever there is a bus transfer point. These shelters should provide seating and protection from the elements. Design should meet minimum city code standards. Refer to the 'Downtown Plan', Pedestrian Improvement Standards and Guidelines for further description of Muni patron areas.

Bollards

Bollards are encouraged at all major pedestrian crossings especially when the curb will be dropped to grade to allow access for the physically disabled. Design of bollards should relate to the architectural context of the surrounding buildings. Removable bollards should be used in pedestrian lanes and rights-of-ways to prohibit vehicular use yet allow for emergency vehicle access.

Street Signage

Signage should be limited to only those signs necessary for traffic flow, parking, and service access. No building identification signage should be located within the street right-of-way.

Street Lighting

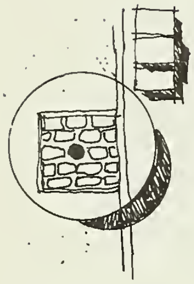
Lighting along the street should meet the city code. Location of poles should be designed to work with the street tree spacing. The pole locations should be integrated with the paving design where possible.

Utilities

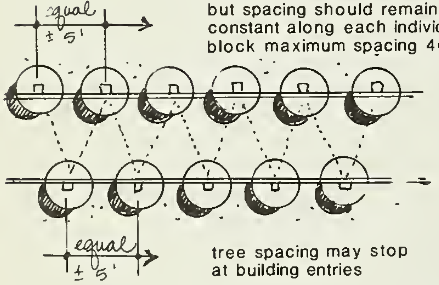
The location and character of utilities are subject to requirements of the San Francisco Department of Public Works. All should be underground with the exception of the Muni overhead electric line which has an 18 foot height limit. To the extent possible, Muni overhead wires should be supported by eye bolts attached to buildings rather than by independent poles.

Street Tree Planting

Street trees should be located in tree grates or paving cut outs against the curb with stone insets to protect the tree. Tree varieties should be consistent along streets and not vary block to block, except where noted on one block streets. A "formal row" street is a street whose tree spacings do not have to align with trees across the street. An "allee" street is a street whose tree spacings align down the length of the street.



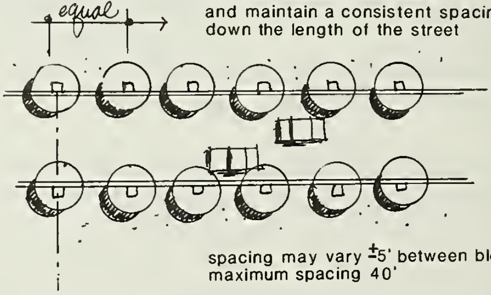
use of stone is encouraged for street tree planting



formal row street trees do not necessarily have to align but spacing should remain constant along each individual block maximum spacing 40'

tree spacing may stop at building entries

Formal row street tree spacing Plan



allee street trees should align on both sides of the street and maintain a consistent spacing down the length of the street

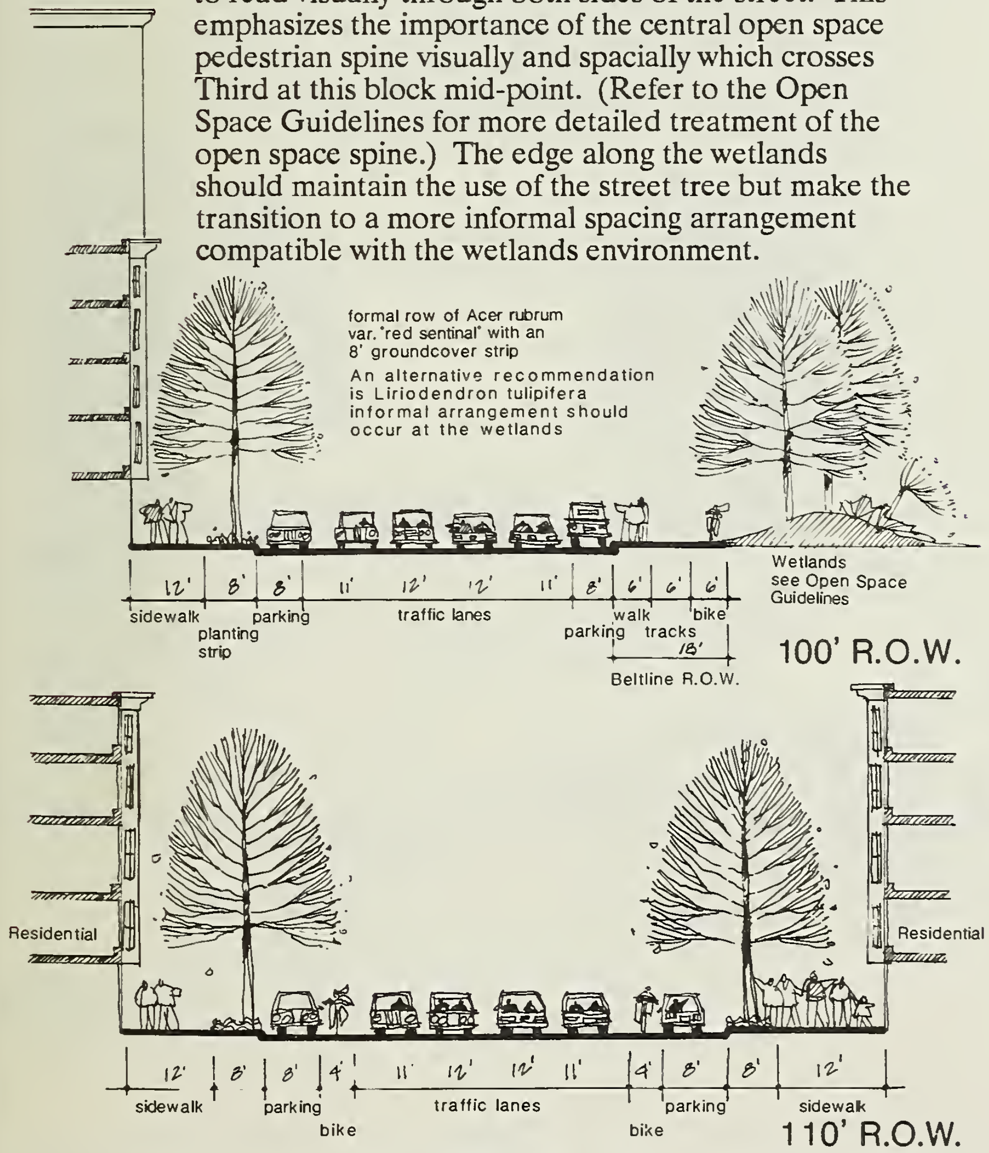
spacing may vary ±5' between blocks maximum spacing 40'

Allee street tree spacing Plan

7.12.3 Street Sections

7.12.3.1 Third Street

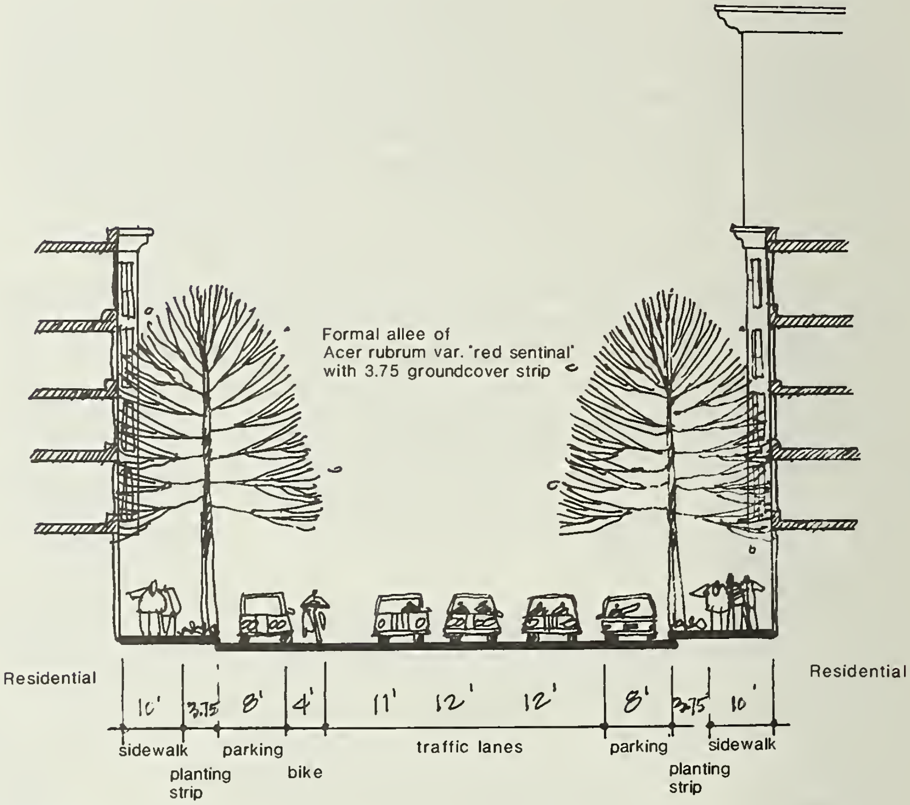
Intent: Third Street should be a 'grand boulevard' with dominant street trees and a generous building setback. The 8 foot green strip along the curb will be planted with evergreen ground cover and a large, formal, deciduous canopy street tree. Acer Rubrum "red sentinel" is recommended. The street trees stop at the mid-block intersection where the central open space spine meets Third Street to allow the open space spine to read visually through both sides of the street. This emphasizes the importance of the central open space pedestrian spine visually and spacially which crosses Third at this block mid-point. (Refer to the Open Space Guidelines for more detailed treatment of the open space spine.) The edge along the wetlands should maintain the use of the street tree but make the transition to a more informal spacing arrangement compatible with the wetlands environment.


formal row of Acer rubrum
var. 'red sentinal' with an
8' groundcover strip
An alternative recommendation
is Liriodendron tulipifera
informal arrangement should
occur at the wetlands
12'
8'
8'
11'
12'
12'
11'
8'
6'
6'
6'
sidewalk
planting strip
parking
traffic lanes
parking
walk
tracks
bike
18'
Beltline R.O.W.
Wetlands
see Open Space
Guidelines
100' R.O.W.
Residential
Residential
12'
8'
8'
4'
11'
12'
12'
11'
4'
8'
8'
12'
sidewalk
parking
bike
traffic lanes
bike
parking
sidewalk
110' R.O.W.

Third Street south of Fourth Street 'a' north of Fourth Street 'b'

7.12.3.2 Fourth Street

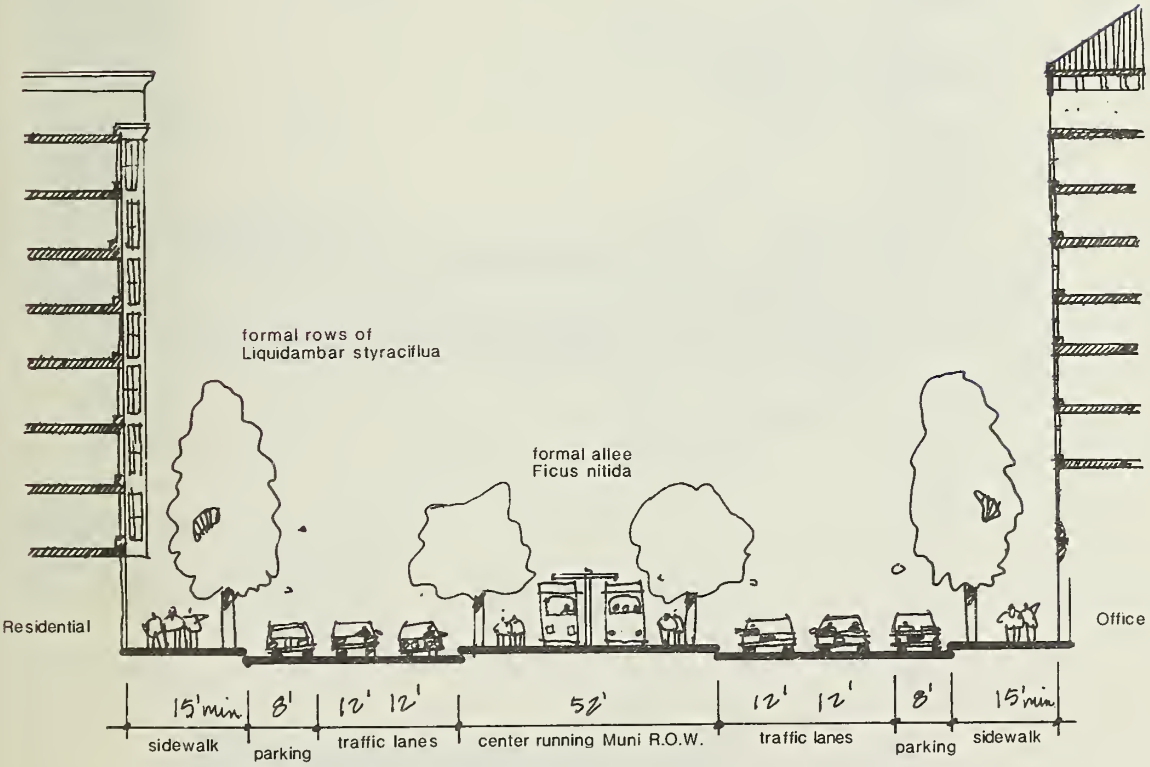
Intent: Since Fourth Street merges into Third Street it should be considered an extension of Third Street by continuing the use of the same street tree. The building face setback will be reduced from 20 feet to 13.75 feet from the edge of the curb. The 8 feet planting strip is reduced to 3.75 feet.


Formal allee of
Acer rubrum var. 'red sentinal'
with 3.75 groundcover strip
Residential
10'
3.75
8'
4'
11'
12'
12'
8'
3.75
10'
Residential
sidewalk
planting strip
parking
bike
traffic lanes
parking
planting strip
sidewalk

Fourth Street
82.5' R.O.W.

7.12.3.3 King Street

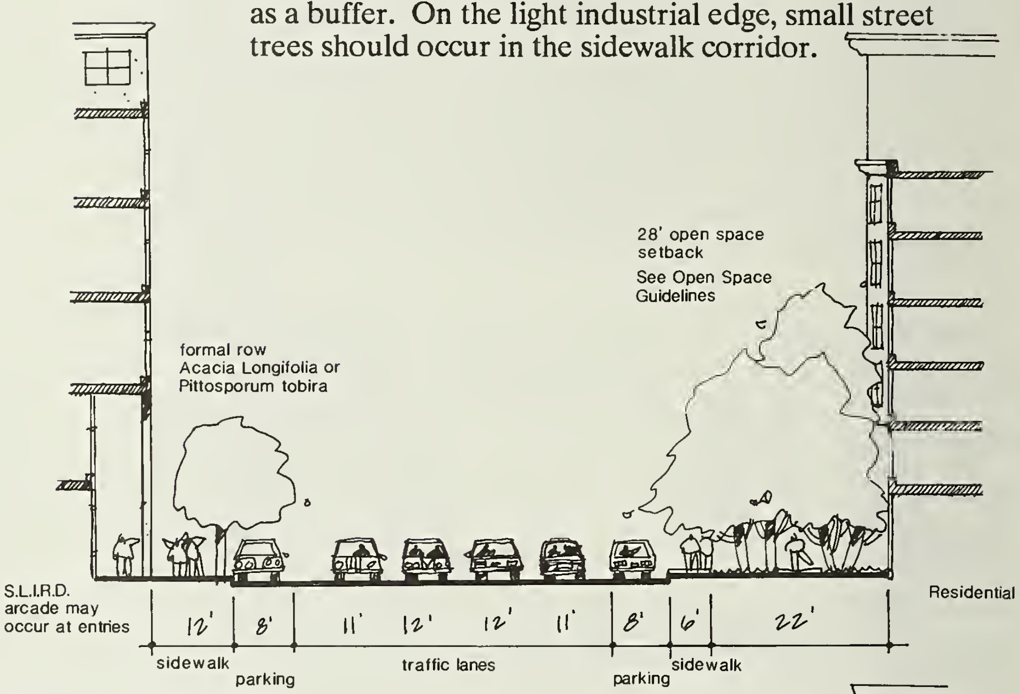
Intent: King Street is a major arterial with a 150 foot wide right-of-way for the 2 blocks between Fifth and Third and 166 foot wide right-of-way between Sixth and Fifth to allow for the I-280 freeway ramps. Sweetgums should be used on building sidewalk corridors in a formal manner. Spacing may vary to respond to the architectural expression of the building but should remain consistent on a block by block basis along each side of the street. Spacing of sweetgums should not be greater than 30 feet on center. Multiple trunks are recommended to create a fully canopy. The center median should be planted with a small evergreen tree to create a more human environment within the large right-of-way. These small trees should align to create a central spine down King Street.


formal rows of
Liquidambar styraciflua
formal allee
Ficus nitida
Residential
Office
15'min
8'
12' 12'
52'
12' 12'
8'
15'min
sidewalk
parking
traffic lanes
center running Muni R.O.W.
traffic lanes
parking
sidewalk

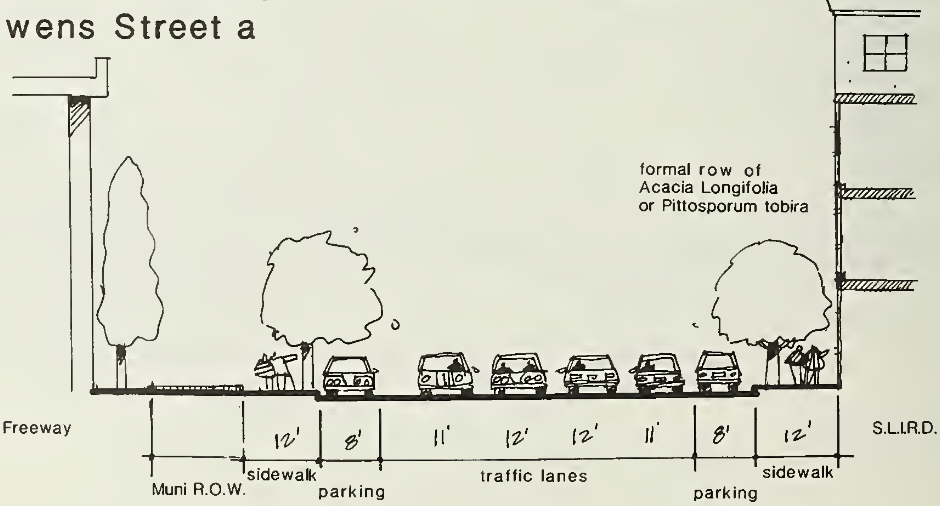
King Street
150' R.O.W.

7.12.3.4 Owens Street

Intent: Owens Street will function as an open space buffer between light industry and housing. Each entrance to a light industrial building should be from a terminus for the neighborhood cross streets. The intent of the street trees is to create a different pedestrian character for each side of Owens Street. The residential side of the street will have a 28 foot landscape setback to act as a buffer. On the light industrial edge, small street trees should occur in the sidewalk corridor.


formal row
Acacia Longifolia or
Pittosporum tobira
28' open space
setback
See Open Space
Guidelines
S.L.I.R.D.
arcade may
occur at entries
Residential
12'
8'
11'
12'
12'
11'
8'
6'
22'
sidewalk
parking
traffic lanes
parking
sidewalk

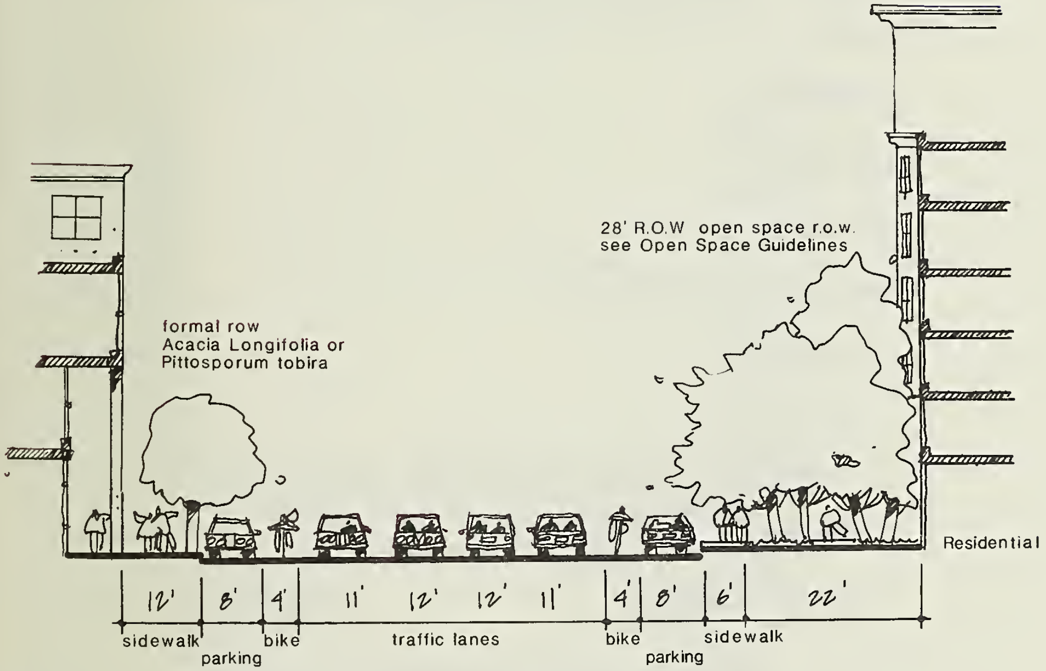
Owens Street a


formal row of
Acacia Longifolia
or Pittosporum tobira
Freeway
S.L.I.R.D.
12'
8'
11'
12'
12'
11'
8'
12'
Muni R.O.W.
sidewalk
parking
traffic lanes
parking
sidewalk

Owens Street b 102' R.O.W.

7.12.3.5 Sixteenth Street

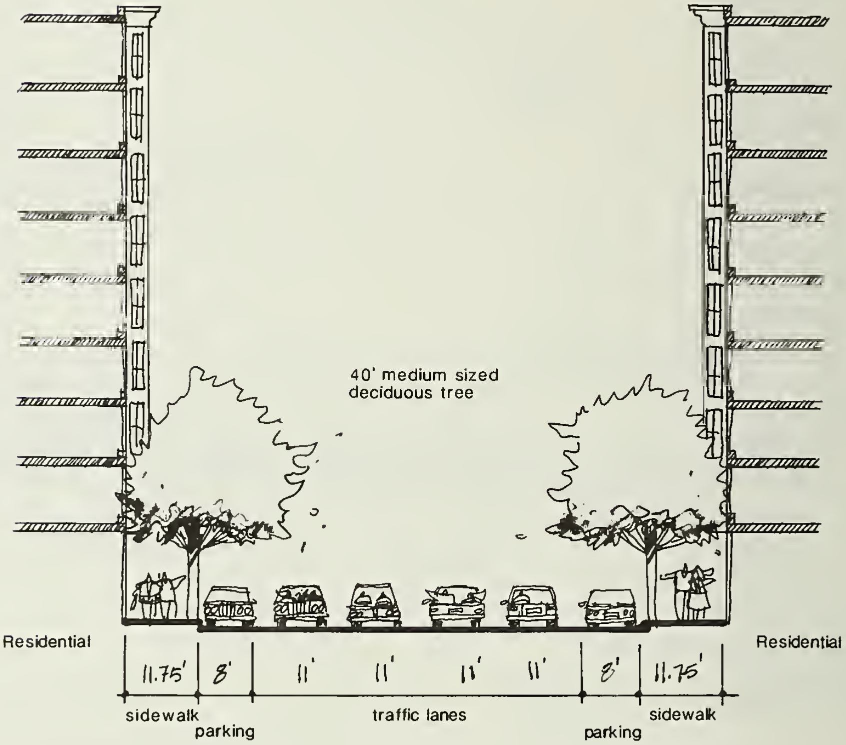
Intent: Sixteenth Street will connect Mission Bay to the Potrero Hill neighborhood. Its landscape treatment should provide a transition to Mission Bay from this existing neighborhood. Each entrance to a light industrial building should be developed to form a terminus for the neighborhood cross streets (see Special Elements 7.2.3.3). The same setback and planting scheme for Owens Street should repeated on Sixteenth Street.


28' R.O.W open space r.o.w.
see Open Space Guidelines
formal row
Acacia Longifolia or
Pittosporum tobira
Residential
12'
8'
4'
11'
12'
12'
11'
4'
8'
6'
22'
sidewalk
parking
bike
traffic lanes
bike
parking
sidewalk

Sixteenth Street
110' R.O.W.

7.12.3.6 Fifth Street

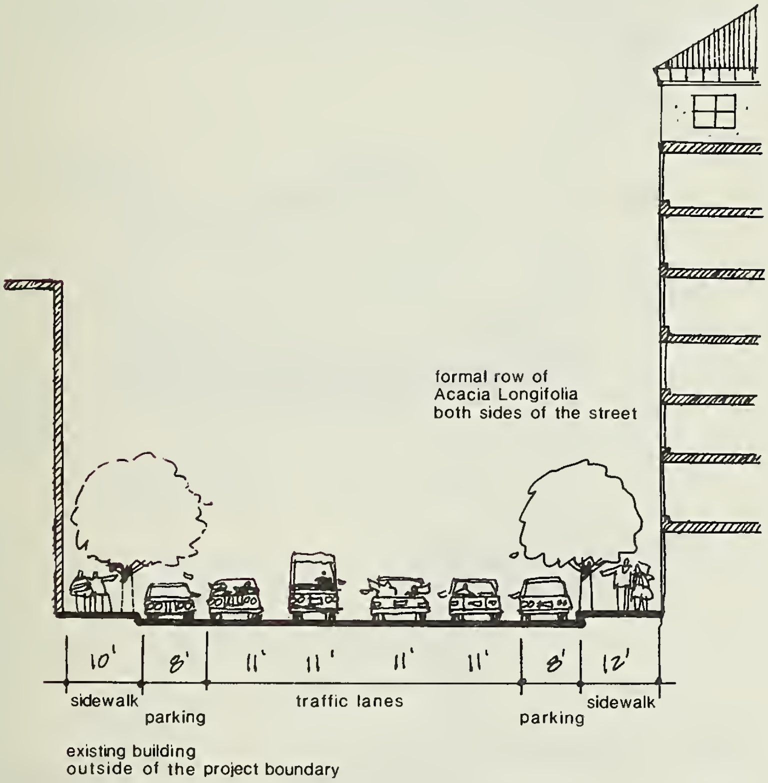
Intent: Fifth Street, north of the channel, is intended as a major view corridor to the channel from the South of Market area. A focal point should be developed at the channel end of the street axis that can serve as a visual and actual destination. All intersections on this corridor shall reflect the importance of Fifth Street as a pedestrian corridor to the channel with special paving accent. The right-of-way will be an extension of the existing 82.5 right-of-way on Fifth Street. For Fifth Street south of the channel, refer to Illinois Street and one block streets.


40' medium sized deciduous tree
Residential
Residential
11.75'
8'
11'
11'
11'
11'
8'
11.75'
sidewalk
parking
traffic lanes
parking
sidewalk

Fifth Street
82.5' R.O.W.

7.12.3.7 Townsend Street

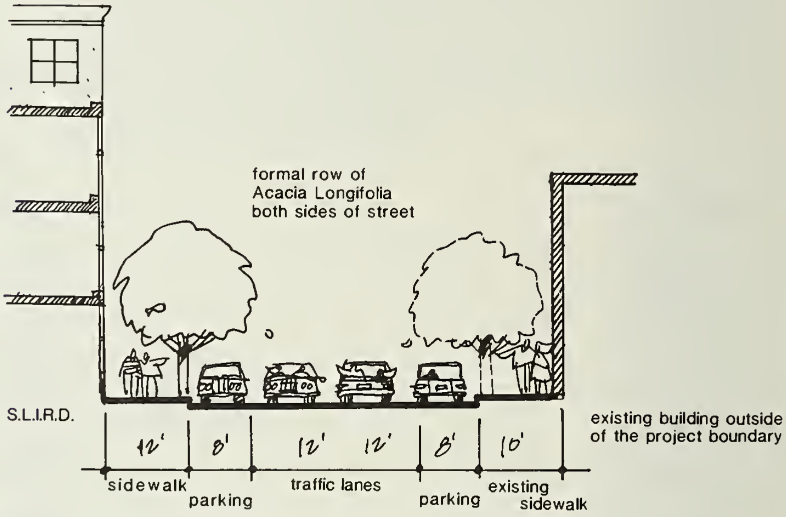
Intent: The intent along Townsend is to integrate the edge of Mission Bay with the South Beach and South of Market areas. Acacia longifolia has been established as a recurring street tree along Townsend in the South Beach area so it is recommended to repeat this tree at this end of Townsend.


formal row of
Acacia Longifolia
both sides of the street
10'
8'
11'
11'
11'
11'
8'
12'
sidewalk
parking
traffic lanes
parking
sidewalk
existing building
outside of the project boundary

Townsend Street
82.5' R.O.W.

7.12.3.8 Mariposa Street

Intent: Mariposa will perform the same function as the Townsend as an edge of Mission Bay and should be designed to blend with the surrounding neighborhood. A small evergreen tree with a dense canopy is recommended.


formal row of
Acacia Longifolia
both sides of street
S.L.I.R.D.
12'
8'
12'
12'
8'
10'
sidewalk
parking
traffic lanes
parking
existing
sidewalk
existing building outside
of the project boundary

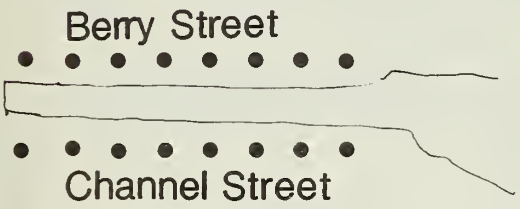
Mariposa Street
62' R.O.W.

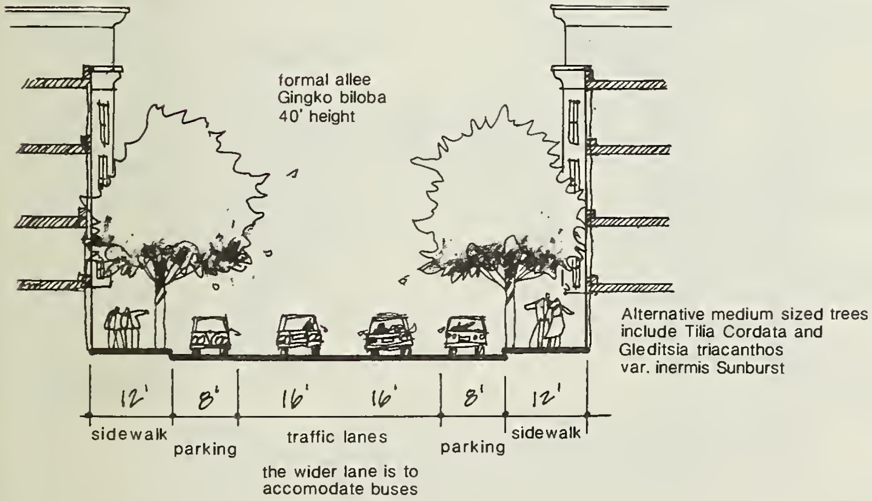
7.12.3.9 Neighborhood Streets

Intent: The neighborhood streets south of the channel should continue the visual hierarchy already established by the use of street trees along the major streets. Park Crescent, Long Bridge, and Channel Streets will have medium sized, non-flowering trees which provide a strong visual theme for each street. The rest of the neighborhood streets will be planted with small to medium sized flowering trees with some small evergreen trees. All the one block streets which project from the Mission Rock, Mission Creek and Sixth Street Loop should be smaller flowering trees than the medium sized flowering pear trees found on that Loop.

7.12.3.10 Channel Street

Intent: This street parallels the Mission Bay channel. It will be used as a major bus route. The intent is for Channel Street to create a southern border for the channel area and for Berry Street to create the northern border. Both streets should use the same medium sized deciduous trees. Linden trees are recommended because of their excellent fall color, pyramidal form, and fine-textured canopy.

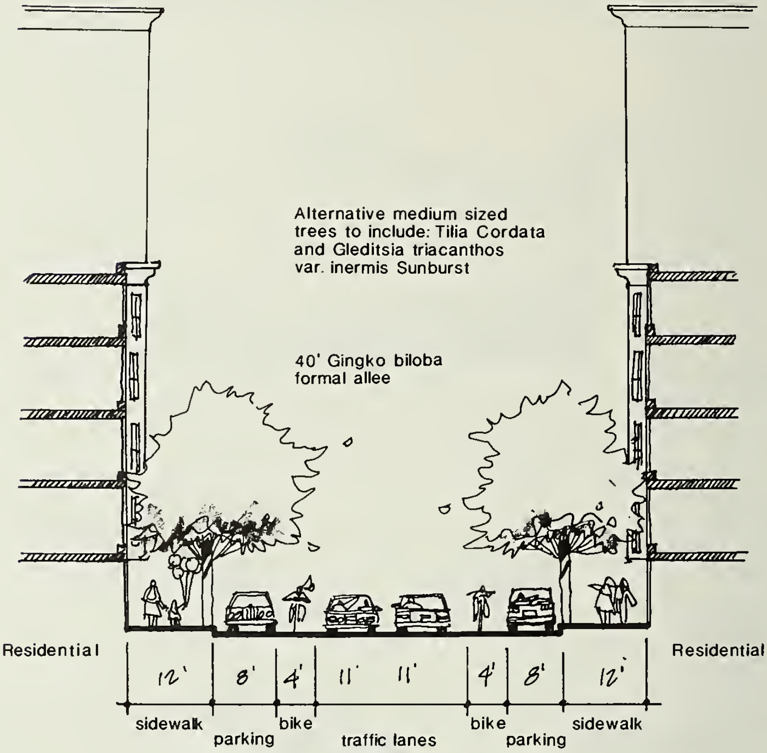

Berry Street
Channel Street


formal allee
Gingko biloba
40' height
Alternative medium sized trees
include Tilia Cordata and
Gleditsia triacanthos
var. inermis Sunburst
12'
8'
16'
16'
8'
12'
sidewalk
parking
traffic lanes
parking
sidewalk
the wider lane is to
accomodate buses

Channel Street
72' R.O.W.

7.12.3.11 Berry Street

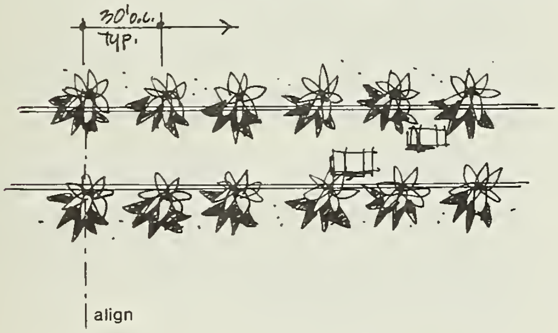
Intent: The landscape along Berry Street should be the same as Channel Street. The trees should be spaced further apart than 25 feet due to the narrowness of this street and the height of the buildings. This will reduce the canyon effect that could occur because of the taller buildings planned along this street.


Alternative medium sized trees to include: Tilia Cordata and Gleditsia triacanthos var. inermis Sunburst
40' Gingko biloba formal allee
Residential
Residential
12'
8'
4'
11'
11'
4'
8'
12'
sidewalk
parking
bike
traffic lanes
bike
parking
sidewalk

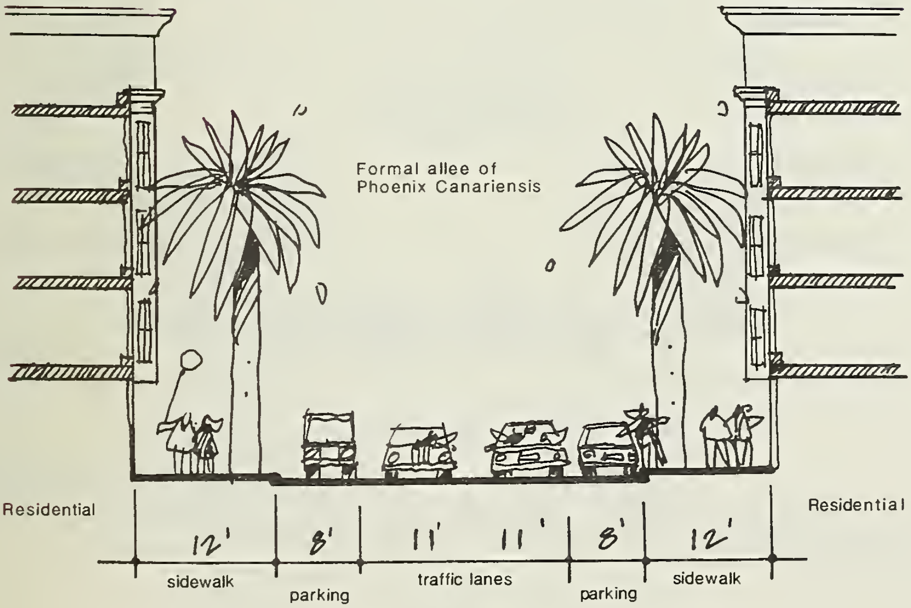
Berry Street
70' R.O.W.

7.12.3.12 Park Crescent

Intent: The Park Crescent Street will be a major neighborhood street linking the neighborhood to the Bay. This street is intended to have a strong formal character that establishes the identity of the neighborhood. An alleé of palm trees will create a "promenade" around the crescent which will emphasize and enhance the curve of the buildings and the street. It will also open up views to the park and the bay due to the high, distinguished tree canopy.


30' o.c.
typ.
align

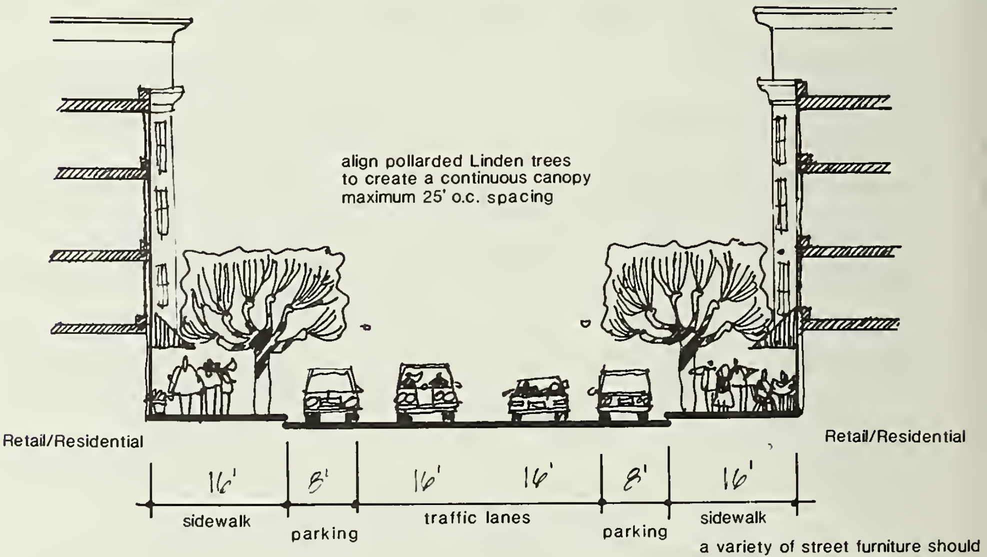
Palm allee street tree spacing
Plan


Formal allee of
Phoenix Canariensis
Residential
Residential
12'
8'
11'
11'
8'
12'
sidewalk
parking
traffic lanes
parking
sidewalk

Park Crescent Street
62' R.O.W.

7.12.3.13 Long Bridge Street

Intent: This will be the major neighborhood shopping street where the emphasis should be on pedestrian street level activity. Site furniture is encouraged to accommodate intense pedestrian activity through generous provision of bus stop shade shelters and benches, public telephones, trash receptacles, and newspaper stands. In addition, cafe tables and commercial displays are to be encouraged to the extent that a clear walkway of at least 8 feet is maintained. The trees should have a classical formal character, be pedestrian in scale and the spacing should align on both sides of the street to create an alleė. Pollarded Linden are recommended. The intent is to create a continuous trellis canopy rather than of singular tree canopies. At the central hub intersection with the open space system, the canopy should stop to open up the plaza to the street as one central space rather than divide both sides of the street. Refer to the Open Space Guidelines for this intersection treatment.



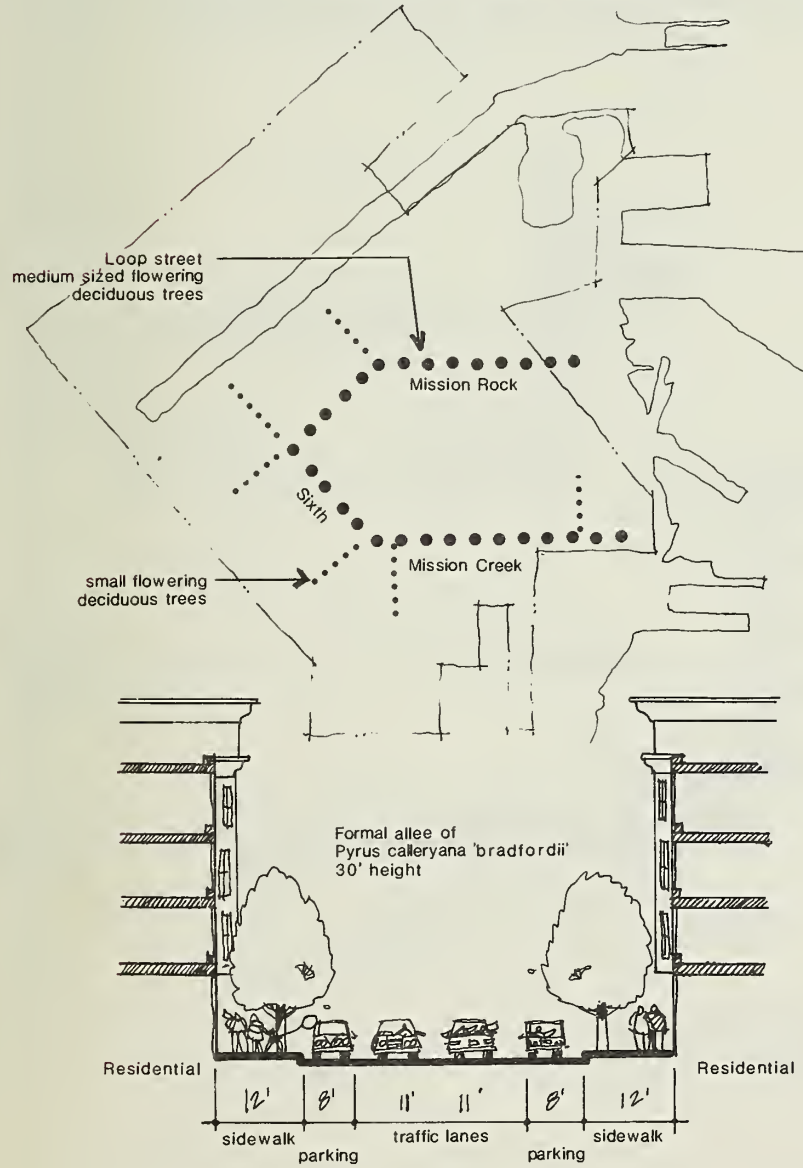
align pollarded Linden trees
to create a continuous canopy
maximum 25' o.c. spacing

a variety of street furniture should
appear along the street sidewalk
pedestrian canopies allowed
see Building Guidelines

Long Bridge Street
80' R.O.W.

7.12.3.14 Mission Rock, Mission Creek, Sixth Street Loop

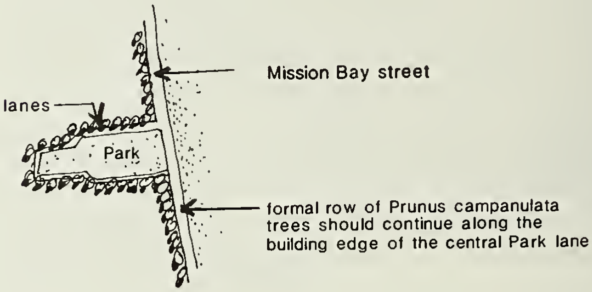
Intent: The intent of the Mission Rock and Mission Creek and Sixth Street Loop is to reiterate the Park Crescent concept of a consistent tree canopy. These trees should have a dominant architectural form and create a formal setting. Prymus calleryana 'Bradford' is recommended. This pear tree variety has a more architectural form than other varieties.

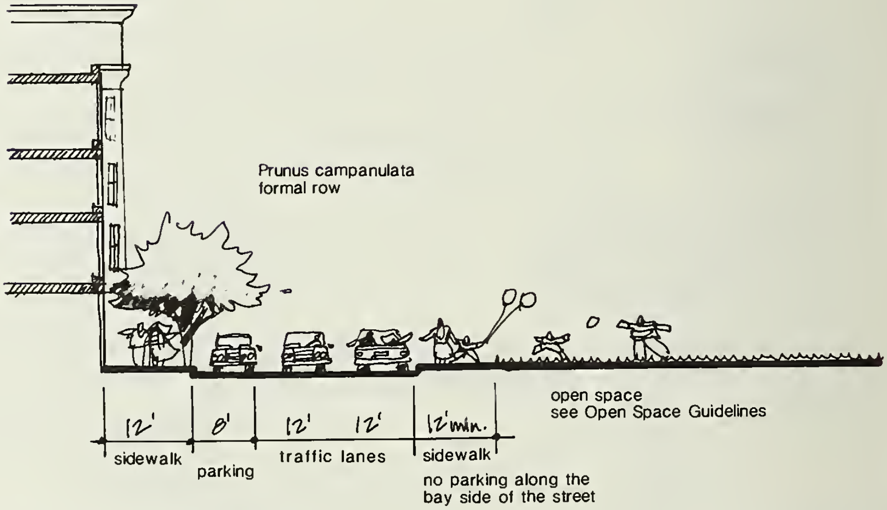

Loop street medium sized flowering deciduous trees
Mission Rock
Sixth
small flowering deciduous trees
Mission Creek
Formal allee of Pyrus calleryana 'bradfordii' 30' height
Residential
Residential
12'
8'
11'
11'
8'
12'
sidewalk
parking
traffic lanes
parking
sidewalk

Mission Rock, Mission Creek, &
Sixth Street Loop
62' R.O.W.

7.12.3.15 Mission Bay Street

Intent: Mission Bay Street will be a water-oriented peripheral street similar to Marina Boulevard at the Marina Green. Street trees should appear on the building side of the street only. A medium sized, flowering tree with a strong architectural form is recommended. Along the lane which fronts the open space block, these trees should continue along the building side of the street and not the open space side of the street. See Open Space Guidelines for more detail of this area.

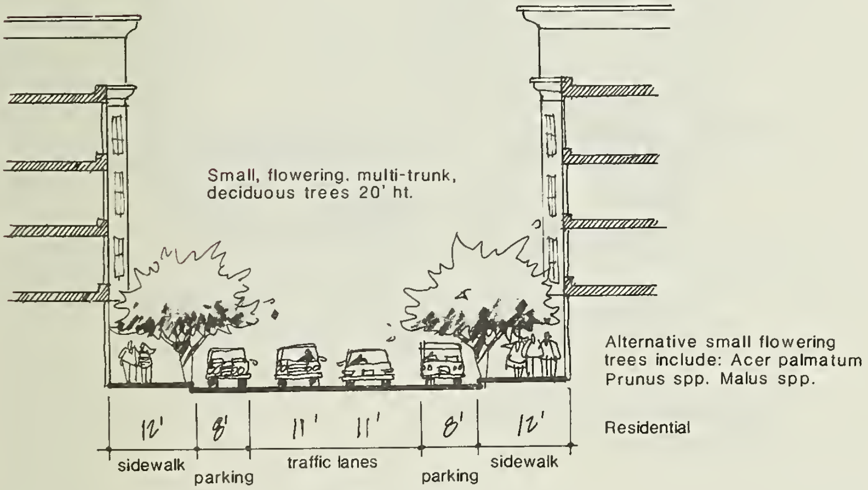

Mission Bay street
lanes
Park
formal row of Prunus campanulata trees should continue along the building edge of the central Park lane


Prunus campanulata formal row
12'
8'
12'
12'
12' min.
sidewalk
parking
traffic lanes
sidewalk
open space
see Open Space Guidelines
no parking along the bay side of the street

Mission Bay Street
56' R.O.W.

7.12.3.16 Illinois Street and One Block Streets

Intent: There will be a range of small flowering trees from which to choose from for these neighborhood streets. Illinois Street will be a continuous street, but the street trees may vary on a block to block basis. Using small trees will aid in orientation for the neighborhood as well as being compatible with the hierarchy of the street system. These trees should be smaller trees than the Bradford Pears used for the Mission Rock Loop.



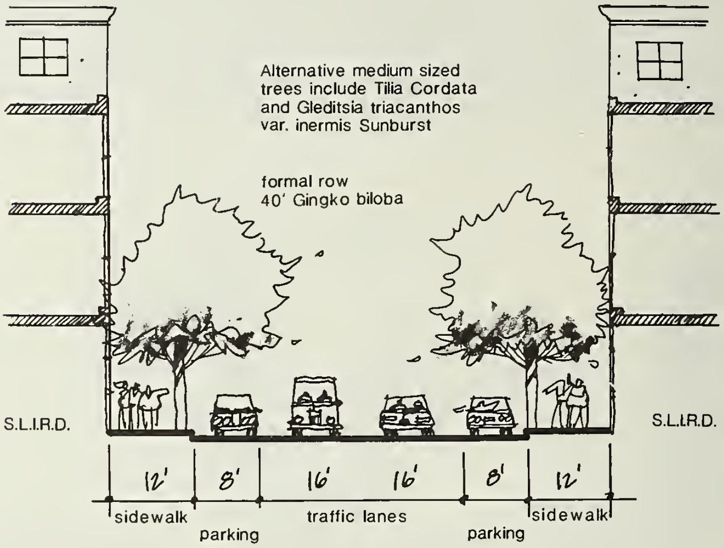
Small, flowering, multi-trunk, deciduous trees 20' ht.

Alternative small flowering trees include: Acer palmatum Prunus spp. Malus spp.

Illinois Street & One Block Streets
62' R.O.W.

7.12.3.17 Seventeenth Street

Intent: Seventeenth Street should use the same street tree used on Berry and Channel Streets -- a medium sized deciduous tree.



Alternative medium sized trees include Tilia Cordata and Gleditsia triacanthos var. inermis Sunburst

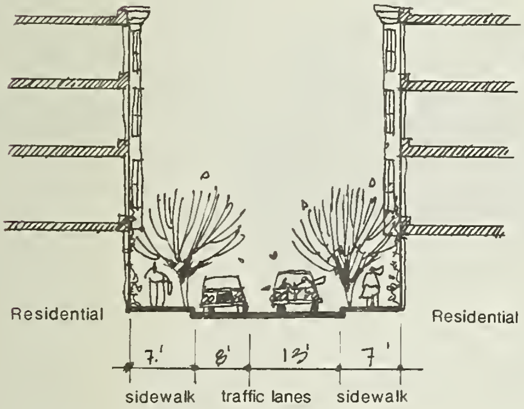
formal row 40' Gingko biloba

S.L.I.R.D.
S.L.I.R.D.
12'
8'
16'
16'
8'
12'
sidewalk
parking
traffic lanes
parking
sidewalk

Seventeenth Street
72' R.O.W.

7.12.3.18 Lanes

Intent: Lanes should be typically one-way neighborhood-oriented streets with one lane of parking. Trees should be very small, deciduous trees with open canopies to allow filtered light along the narrow right-of-way. Sidewalks may be flush with roadways and bollards may be substituted for curbs for building protection.

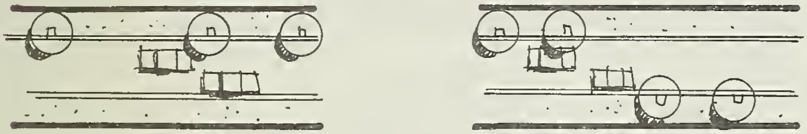


small flowering deciduous trees
spacing may vary

Recommended trees
include: Prunus cerisifera
Acer palmatum Malus spp.

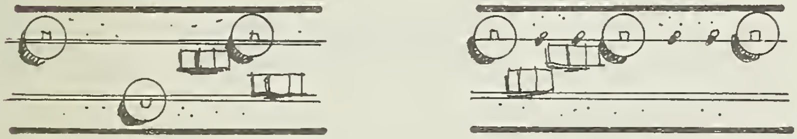
35' R.O.W. Lane

trees in lane do not have to be equally spaced
spacing should be greater than 30' to allow sunlight into the lane



1. varied spacing along one side of lane

2. grouped alternating spacing on both sides of lane



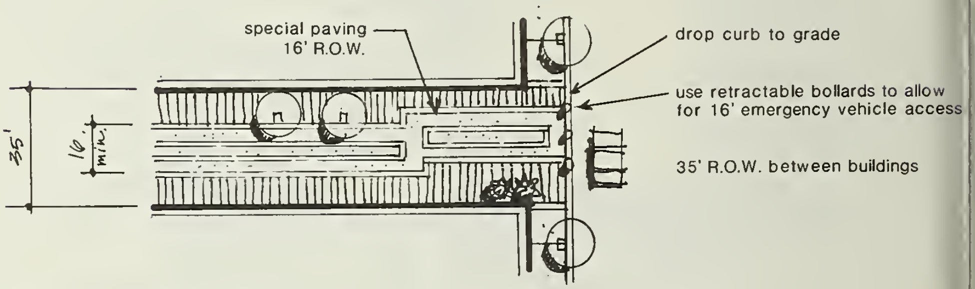
3. alternating spacing

4. use of bollards and trees on the traffic side of lane to prohibit parking and eliminate curb

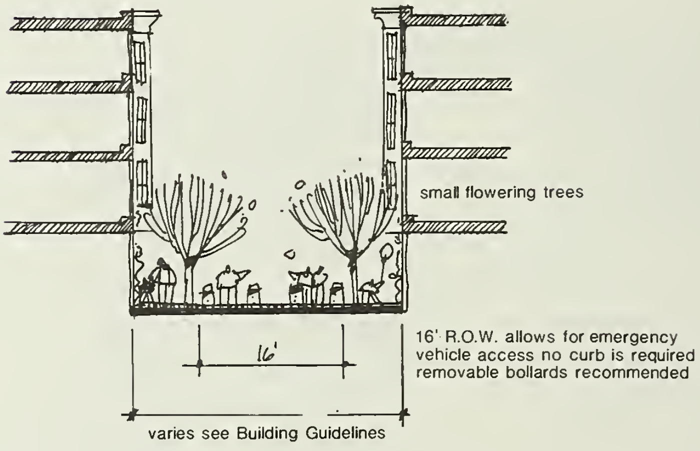
Planting alternative at 35' lanes

7.12.3.19 Pedestrian Lanes

Intent: These will be lanes in which vehicular traffic will be restricted to emergency vehicles only. Removable bollards are recommended to close off the street to regular traffic. Special paving is also encouraged. Small deciduous trees should be used in these lanes to allow filtered light within the narrow right-of-way.


special paving
16' R.O.W.
35'
16' min.
drop curb to grade
use retractable bollards to allow for 16' emergency vehicle access
35' R.O.W. between buildings

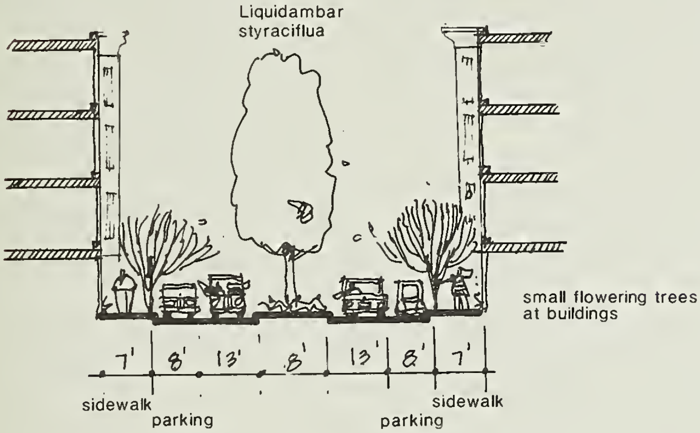
Pedestrian lane
Plan


small flowering trees
16'
16' R.O.W. allows for emergency vehicle access no curb is required removable bollards recommended
varies see Building Guidelines

16' R.O.W. Pedestrian Lane

7.12.3.20 Lanes with Medians

Intent: The intent for lanes with medians is to plant the medians with large trees and to plant the building/sidewalk edge with small trees.


Liquidambar styraciflua
small flowering trees at buildings
7'
8'
13'
8'
13'
8'
7'
sidewalk
parking
parking
sidewalk

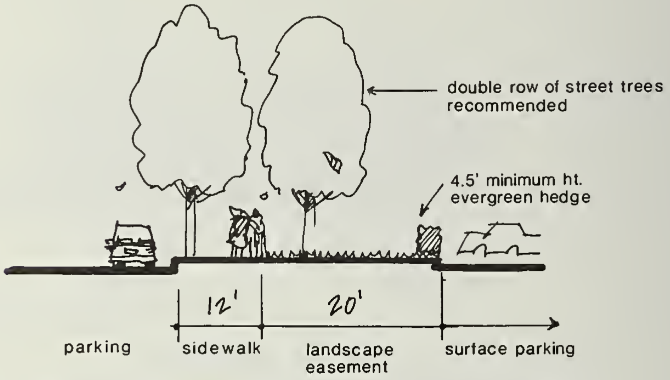
Lane with center median
64' R.O.W.

7.12.3.21 Lanes at Light Industrial Area

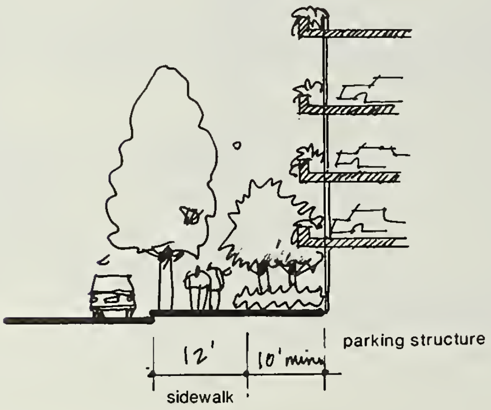
Intent: The intent of these lanes is to have a 40 foot right-of-way to allow adequate passage for truck and service traffic.

7.12.3.22 Parking Structures Setbacks

Intent: The intent is to eliminate blank building wall facades facing streets. Parking structure walls should have a minimum 10-foot landscape setback and a minimum of 20-foot setback where surface parking occurs. Security walls should be designed not to be blank walls and allow vine pockets to occur at the base. Refer to the Building Guidelines for parking structure facade treatments.


double row of street trees recommended
4.5' minimum ht. evergreen hedge
12'
20'
parking
sidewalk
landscape easement
surface parking

Minimum Setbacks at Surface Parking


parking structure
12'
10' min
sidewalk

Minimum Setbacks at Parking Structures

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EQE

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Acknowledgements

The Department wishes to acknowledge the contributions of City agency and other public agency staff who participated in various aspects of the work which led to the plan.

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Chief Administrative Officer
  Solid Waste Program

City Attorney's Office

Department of Electricity

Department of Public Works
  Clean Water Program

Department of Public Health

Department of Social Services

Human Rights Commission

Mayor's Office

Mayor's Criminal Justice Council

Mayor's Office of Community Development

Mayor's Office of Emergency Services

Mayor's Office of Housing and Economic Development

Parking Authority

Port of San Francisco

Private Industry Council

Public Utilities Commission
  Bureau of Energy Conservation
  Municipal Railway
  Water Department

Real Estate Department

Recreation & Park Department

San Francisco Fire Department

San Francisco Police Department

San Francisco Public Library

San Francisco Redevelopment Agency

San Francisco Unified School District

OTHER PUBLIC AGENCIES

Association of Bay Area Governments (ABAG)

Bay Conservation Development Commission (BCDC)

Caltrans

Metropolitan Transportation Commission (MTC)

SANTA FE PACIFIC REALTY CORPORATION

The Department wishes to acknowledge the contributions of Santa Fe Pacific Realty Corporation, the project sponsor for Mission Bay development, in providing gift funding to the City for this work and participating along with its consultant team in the planning process which led to this plan.

ORGANIZATIONS AND INDIVIDUALS

The Department wishes to acknowledge the contributions of the many civic, community and neighborhood organizations and participating individuals who provided many hours of their time and valuable insights during the open planning process which led to this plan. The listing below includes many of those participants, and is neither intended to be all-inclusive nor to suggest an endorsement of this proposal for citizen review.

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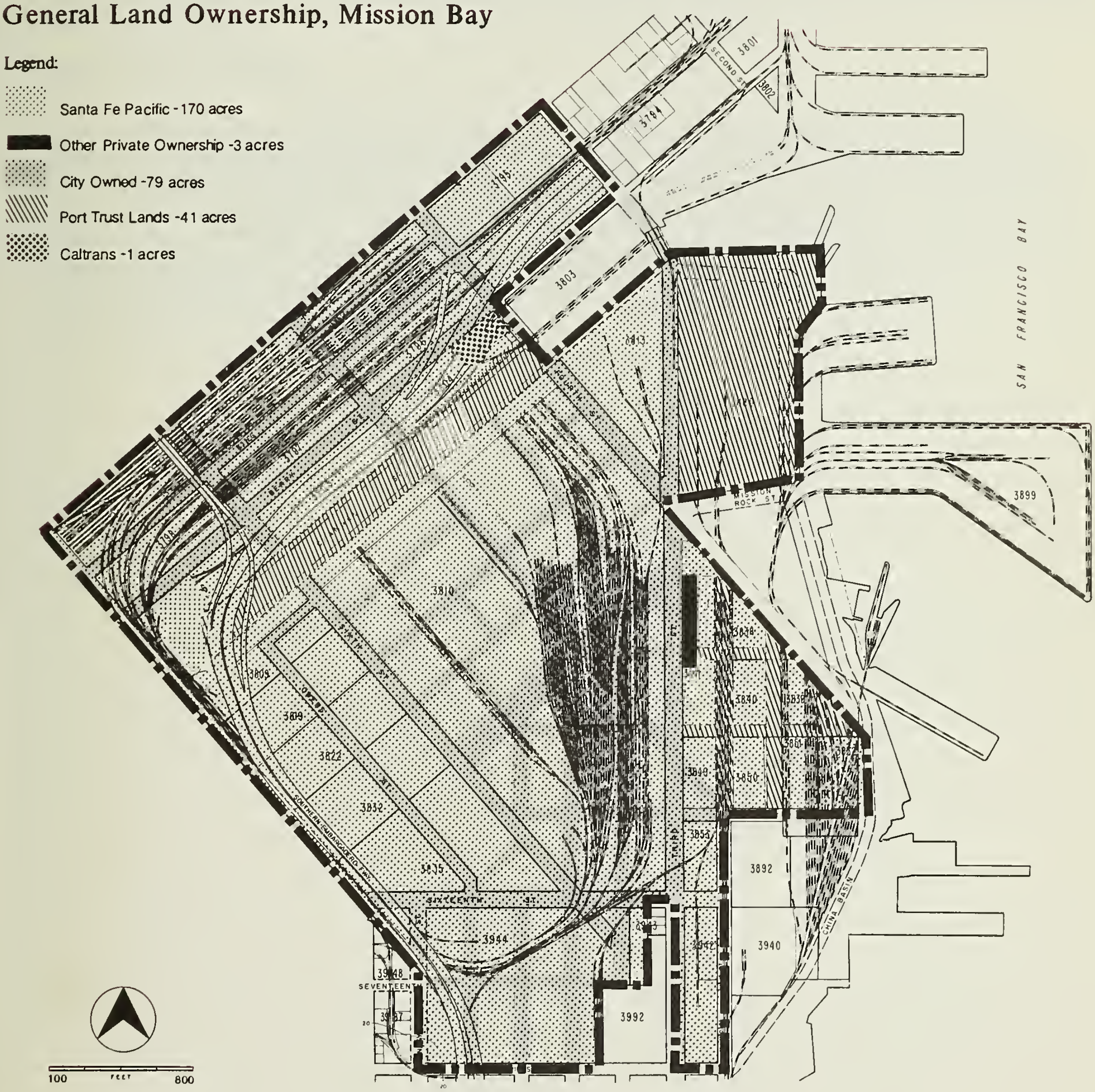
APPENDICES

Appendix 1: Mission Bay Land Ownership

General Land Ownership, Mission Bay


Legend:
Santa Fe Pacific - 170 acres
Other Private Ownership - 3 acres
City Owned - 79 acres
Port Trust Lands - 41 acres
Caltrans - 1 acres
SAN FRANCISCO BAY
SECOND ST
MISSION ROCK ST
SIXTEENTH ST
SEVENTEENTH
CHINA BASIN
3801
3802
3794
3795
3803
3813
3899
3810
3808
3809
3822
3832
3835
3838
3840
3839
3848
3850
3853
3892
3940
3942
3944
3992
3948
3937
100
FEET
800

Note: Drawing depicts more railroad tracks than presently exist.

Appendix 2: San Francisco Comparisons

This section provides information on present City development to offer a local reference point for various plan features. This includes housing densities and new housing developments, office buildings, hotels, retail uses and neighborhood commercial districts, open space and recreational facilities, and streets.

HOUSING DENSITIES

Several San Francisco neighborhoods often mentioned in discussions about Mission Bay are Potrero Hill, the Marina, Russian Hill, North Beach/Telegraph Hill and Nob Hill. The densities of selected blocks in these neighborhoods is presented in the following tables. These densities exclude from the calculation any non-residential land such as buildings or blocks that are solely commercial or institutional, streets, alleys and parks. The Mission Bay plan densities include about nine acres of alleys with mini-parks internal to the housing blocks. If these were excluded, the comparable Mission Bay housing density would be about 87 units per acre (total units/residential acreage + alleys).

Potrero Hill

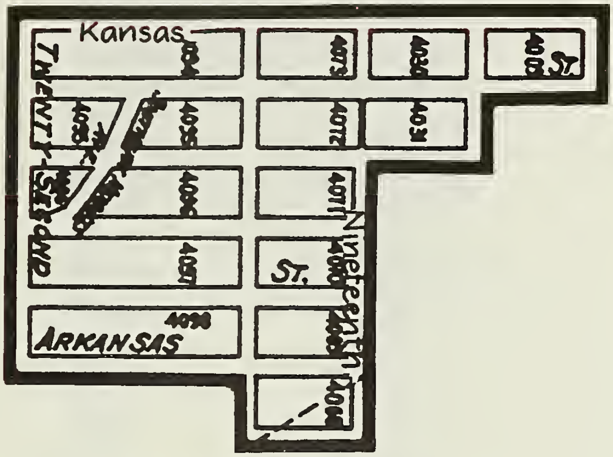
Assessor's Block No.	Number of Units	Res. Acres/ Block	# Units/ Res. Acre
4009	33	1.60	20.6
4030	73	1.72	42.4
4031	53	1.85	28.6
4068	39	1.16	33.6
4069	49	1.80	27.2
4070	87	1.84	47.3
4071	46	1.83	25.1
4072	44	1.82	24.2
4073	60	1.65	36.4
4094	80	3.66	21.9
4095	88	3.33	26.4
4096	66	3.06	21.6
4097	75	3.68	20.4
4098	75	3.81	19.9

Average Density Units/Res. Acre = 26.5

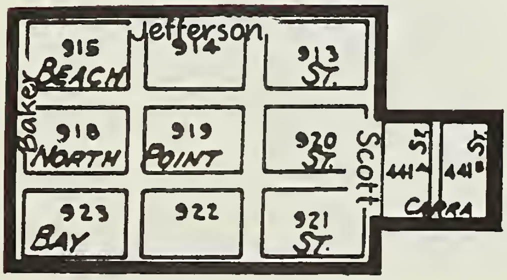
Marina District

Assessor's Block No.	Number of Units	Res. Acres/ Block	# Units/ Res. Acre
913	114	2.60	43.9
914	181	2.60	69.6
915	75	2.60	28.9
918	105	2.60	40.4
919	154	2.60	59.2
920	46	.87	52.9
921	120	2.60	46.2
922	149	2.60	57.3
923	92	2.60	35.4
441a.	58	1.84	31.6
441b.	63	1.84	34.3

Average Density Units/Res. Acre = 43.75


Kansas
Twenty-Second
4073
4072
4031
4071
Nineteenth
St.
4098
Arkansas

Selected Potrero Hill Blocks


Jefferson
915
914
913
Beach
St.
Baker
918
919
920
North
Point
St.
Scott
St.
441A
441B
923
922
921
Bay
St.

Selected Marina Blocks

Russian Hill

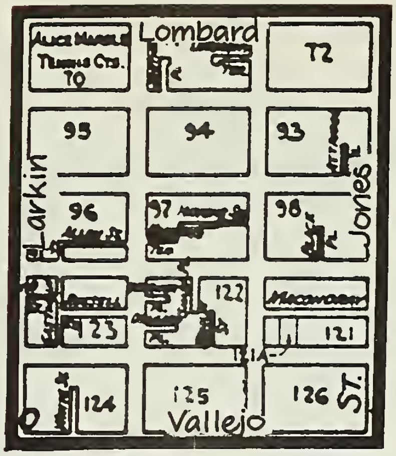
Assessor's Block No.	Number of Units	Res. Acres/ Block	# Units/ Res. Acre
70	0	--	--
71	137	2.34	58.5
72	141	1.85	76
93	132	2.12	62
94	117	2.60	44.9
95	120	2.20	54.6
96	163	2.28	71.4
97	188	2.49	75.5
98	158	2.55	62.1
121	201	2.18	92.3
122	159	2.60	61
123	143	2.09	68.6
124	155	2.36	65.6
125	223	2.53	88
126	80	2.38	33.6

Average Density Units/Res. Acre = 61.3

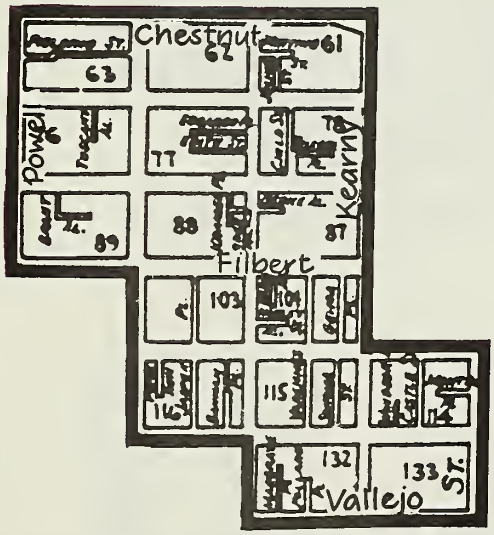
North Beach/Telegraph Hill

Assessor's Block No.	Number of Units	Res. Acres/ Block	# Units/ Res. Acre
61	112	2.44	46
62	167	2.60	64.1
63	145	2.45	59.3
76	149	2.60	57.2
77	160	2.38	67.4
78	141	2.10	67.3
87	112	1.55	72.5
88	191	2.24	85.2
89	90	1.31	68.8
103	121	1.47	82.5
104	229	1.86	123.2
114	171	2.40	71.3
115	215	2.35	91.4
116	139	1.53	90.6
132	207	2.32	89.2
133	173	2.60	66.4

Average Density Units/Res. Acre = 75


Lombard
Larkin
Jones
ST.
Vallejo
70
72
95
94
93
96
97
98
122
121
123
124
125
126

Selected Russian Hill Blocks

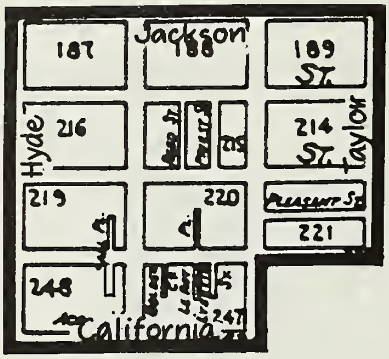

Chestnut
Powell
Kearny
Filbert
Vallejo
ST.
61
62
63
77
78
87
88
89
103
104
115
116
132
133

Selected North Beach / Telegraph Hill Blocks

Nob Hill

Assessor's Block No.	Number of Units	Res. Acres/ Block	# Units/ Res. Acre
187	190	2.36	82.8
188	204	2.26	90.3
189	197	2.60	75.6
214	304	2.60	116.7
215	214	2.33	91.9
216	282	2.54	111.2
219	254	2.45	103.8
220	256	2.15	119.1
221	257	2.37	108.5
247	323	2.24	144.2
248	231	2.31	100.1

Average Density Units/Res. Acre = 103


187
Jackson
188
189
ST.
Hyde
216
214
ST.
Taylor
215
219
220
221
248
California
247

Selected Nob Hill Blocks

The following tables provide information on selected new rental and condominium housing developments.

November 5, 1986

SAN FRANCISCO DEPARTMENT OF CITY PLANNING

RENTAL SURVEY: MAJOR NEW RENTAL PROJECTS

Map Key	Project Name/ Address	Total Units	Date Open	Unit Type	Unit Mix	Ave. Unit Size	Ave. Unit Rent	Ave. Rent/ sq.ft.
1.	Winterland Post at Steiner (95 Phase I & II)	304	1986	St.	28	473	$ 785	1.65
				1 Bed/Jr.	6	523	900	1.72
				1 Bed	38	617	945	1.53
				Penths	6	740	1,137	1.53
				2 Bed	17	915	1,374	1.47
	20% Low/Mod Units: (80% of Median)			St.		473	481	1.
				1 Bed		617	550	.89
				2 Bed		915	619	.67
2.	St. Francis Place	410	1986	St.	40	533	703	1.32
				1 Bed/Jr.	26	364	760	1.35
				1 Bed	98	683	830	1.21
				2 Bed	218	1,071	1,300	1.21
				3 Bed/2b	2	1,429	1,685	1.18
				2 Bed/2b	26	1,130	1,473	1.31
	20% Low/Mod Units: (80% of Median)			St.		533	530	.99
				1 Bed		695	610	.87
				2 Bed		1,071	690	.64
3.	Mission Park 3200 Army St.	130	1986	26	107	850	835	.98
	20% Low/Mod Units: (80% of Median)			28	23		619	

Map Key	Project Name/ Address	Total Units	Date Open	Unit Type	Unit Mix	Ave. Unit Size	Ave. Unit Rent	Ave. Rent/ sq.ft.
4.	Wicklow Apts. 328 Franklin St. S.F. Redevelopment Project Area	85	1985	St.	1	500	$ 400	.8
				1 Bed	84	900	650	.72
5.	Dorothy Day Community 54 McAllister Catholic Social Services (disabled and sr. housing)	100	1986	St.	25	415	657	1.58
				1 Bed	75	540	758	1.40
6.	Brown Plaza 870 O'Farrell at Polk Project may be marketed as a Senior Retirement Community	1010	1987	St.	16	562	(Rent information not yet determined--to be marketed by 1/87	
				Penths	26	1100		
				2 Bed	6	1172		
7.	Van Ness Center 1700 Calif. at Van Ness	47	1986	1 Bed	22	755	(Rent levels not yet determined--to be marketed by 1/87)	
				2 Bed	25	1,220		
8.	La Galleria 900 Bush St. *(about 30 units are owner-occupied)	157*	1981	St.	13	538	788	1.46
				1 Bed/1b	91	741	998	1.35
				1 Bed/2b/DN	68	808	1,190	1.47
				2 Bed/2b	8	818.5	1,425	1.74
				3 Bed/2b/Pent	6	1,129	1,610	1.43
				4 Bed/3b/Pent	1	1,793	2,200	1.23
9.	Fox Plaza 1390 Market St.	446	1966	St.	300	446	620	1.39
				1 Bed/1b	96	671	871	1.30
				2 Bed/1b	50	814	1,020	1.25

December 5, 1986

SAN FRANCISCO DEPARTMENT OF CITY PLANNING

CONDO SURVEY: PRICES OF MAJOR NEW CONDOMINIUM PROJECTS

Map Key	Project Name/ Address	Total Units	Date Open	Unit Type	Unit Mix	Ave. Size	Ave. Unit $Prices (000)	Ave. $Price/ sq.ft.
1.	Jackson Square	24	1/1986	St.	8	670	$ 125	$ 186
	1590 Jackson			1 Bed	12	900	175	
				2 Bed	8	1,200	230	
2.	Chestnut Court	18	11/1986	1 Bed	2	875	165	188
				2 Bed	14	1,300	230	176
				3 Bed	2	1,750	264	150
3.	Park Hill	136	1/1987	St.	4	630	78-133	198
	355 Buena Vista			1 Bed	114	850	115-200	184
				2 Bed	18	1,200	196-365	233
4.	Ocean Commons	33	1986	1 Bed	13	670	84	125
	1920 Ocean &			2 Bed	20	894	110	123
	8 Keystone							
5.	501 Arguello & Geary	12	1986	2 Bed	12	1,215	232	190
6.	Enville	52	1985	St.	3	650	100	153
	785 Golden Gate			1 Bed	15	840	125	148
				2 Bed	34	1,180	160	135
7.	Opera Plaza	450	1983	St.	32	NA	130	NA
	Van Ness Ave.			1 Bed Jr.	64	NA	150	NA
				1 Bed	239	NA	180	NA
				2 Bed	32	NA	235	NA
				Townhouses	80	NA	270	NA
				3 Bed	3	NA	280	NA

Map Key	Project Name/ Address	Total Units	Date Open	Unit Type	Unit Mix	Ave. Size	Ave. Unit $Prices (000)	Ave. $Price/ sq.ft.
8.	The Amelia 1980 Sutter	36	11/1984	1 Bed	7	775	$ 157	$ 202
				1 Bed, Den	2	960	172	179
				2 Bed	9	900	185	205
				2 Bed Townhouses	18	1,245	232	186
9.	333 Bush	45	12/1986	1 Bed	6	1,100	270-320	
				2 Bed	36	1,300	375-714	
10.	Daniel Burnham Ct. 1200 Van Ness at Post *Phase I 85 Units completed	245*	1986	St.	11	563	110-175	
				1 Bed	59	826	150-310	
				2 Bed	13	1,064	240-340	
				2 Bed/DN	1	1,590	475	
				3 Bed	1	1,613	440	

*Plus Homeowners Dues/
Mo $206-522

MID-RISE OFFICE DEVELOPMENT

The Northeastern Waterfront area north of Washington Street along the Sansome/Battery corridor has about 6.5 million square feet of office space (Northeastern Waterfront Land Use Survey, E.M. Rose Associates, 1985). The following table presents various mid-rise office buildings.

Major Mid-Rise Office Space Development

Assessor's Block	Project/ Location	Stories/ Height	Gross Floor Area/ Sq. Ft.
257	Metropolitan Life California Street	7/120'	213,000
814	CSAA 155 Hayes	6/72'	135,959
270	P.T. and T. 430 Bush	7/120'	155,515
814	CSAA 150 Hayes	8/120'	84,907
84	Levi Plaza 1355 Sansome	7/	870,000
196	Pacific Lumber 500 Washington	8/136'	128,000
351	10 U.N. Plaza	6/	92,000
3724	YBC West	6/86'	335,000
166	222 Pacific at Front	7/	141,000
351	1170 Market	7/80'	40,000
112	Ice House		209,000

HOTELS

The following table presents various low- and mid-rise first class hotels ranging from 250 to 580 rooms.

PROPERTY	NUMBER OF ROOMS
Fisherman's Wharf	
Holiday Inn	580
Sheraton	525
Marriott	258
Ramada Inn	231
Travelodge at the Wharf	250
Civic Center	
Cathedral Hill	400
San Franciscan	400

RETAIL USES

The following tables give the sizes of selected neighborhood commercial districts (NCDs) and commercial establishments.

Neighborhood Commercial District	Total Commercial*	Total Non-Residential
Chestnut	290,900	341,000
Castro	317,700	332,700
Inner Clement	564,200	592,300
Outer Clement	129,700	188,000
Upper Fillmore	425,100	559,200
Haight	399,800	468,900
Polk	863,900	1,423,700
Sacramento	365,500	398,100
Union	657,200	705,700
24th/Noe	225,500	286,100
West Portal	292,000	362,800

*(Retail, Eating and Dining, Office)

Sizes of Selected Commercial Establishments

Establishment	Location	Gross Square Feet
Artemis Cafe	Valencia NCD	1,650
Bank of America	Stockton/Green	5,600
Bank of America	Market/Castro	3,800
Bell Market	24th Street-Noe NCD	18,750
Bud's Ice Cream	24th Street-Noe NCD	260
Bill's Place	Outer Clement NCD	1,575
Cafe Flore	Upper Market NCD	1,950*
Caffe Roma	North Beach NCD	3,200
Cala Market	Castro NCD	9,000
Cala Market	So. Van Ness nr. 24th	19,775
Castro Theater	Castro NCD	14,500**
Church St. Station	Upper Market NCD	2,250
City Lights Bookstore	North Beach NCD	1,800
Clay Theater	Upper Fillmore NCD	3,808
Elephant Walk Bar	Castro NCD	1,430
Empire Theater	West Portal NCD	10,900
First Interstate Bank	West Portal NCD	4,000
Fook Restaurant	Inner Clement NCD	4,350
Hayes Street Grill	Hayes-Gough NCD	4,625
Home Savings	West Portal NCD	5,500
Holy City Zoo	Inner Clement NCD	1,900
I-Beam	Haight Street NCD	4,950
Leticia's Restaurant	Upper Market NCD	2,470
Lick's Super	Inner Clement NCD	11,400
Little Bell Market	24th Street-Noe NCD	6,240
Little Joe's	North Beach NCD	2,325
MacDonald's	24th Street-Mission NCD	4,500
Park Bowl	Haight Street NCD	24,700
Perry's	Union Street NCD	2,500
Roxie Theater	Valencia NCD	3,240
Safeway	Diamond Heights	27,000
Safeway	Marina Boulevard	39,150
Safeway	Market/Church	23,400
Safeway	4950 Mission	35,189
Safeway	Ocean Beach	37,500
Safeway	Webster/Geary	48,000
Salvation Army Thrift Store	Valencia NCD	8,400
Tosca Cafe	Broadway NCD	1,200
United Bank	Inner Clement NCD	3,200
Washington Sq. Bar & Grill	North Beach NCD	2,600
West Portal Market	West Portal NCD	4,500
Woolworth	West Portal NCD	9,000
York Theater	24th Street-Mission NCD	7,900

*(inc. outdoor area) **(not inc. balcony)

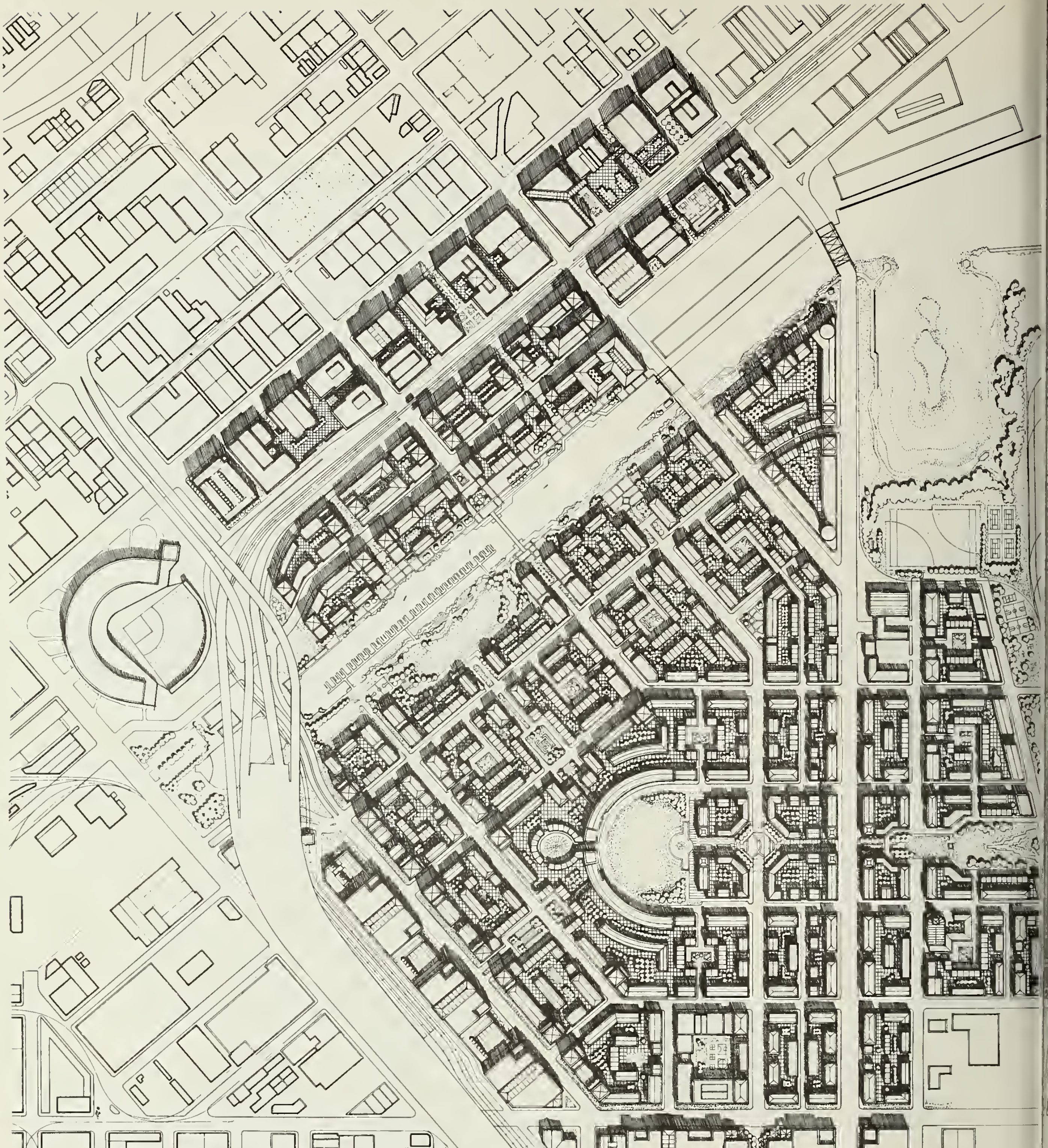
OPEN SPACE AND RECREATIONAL FACILITIES

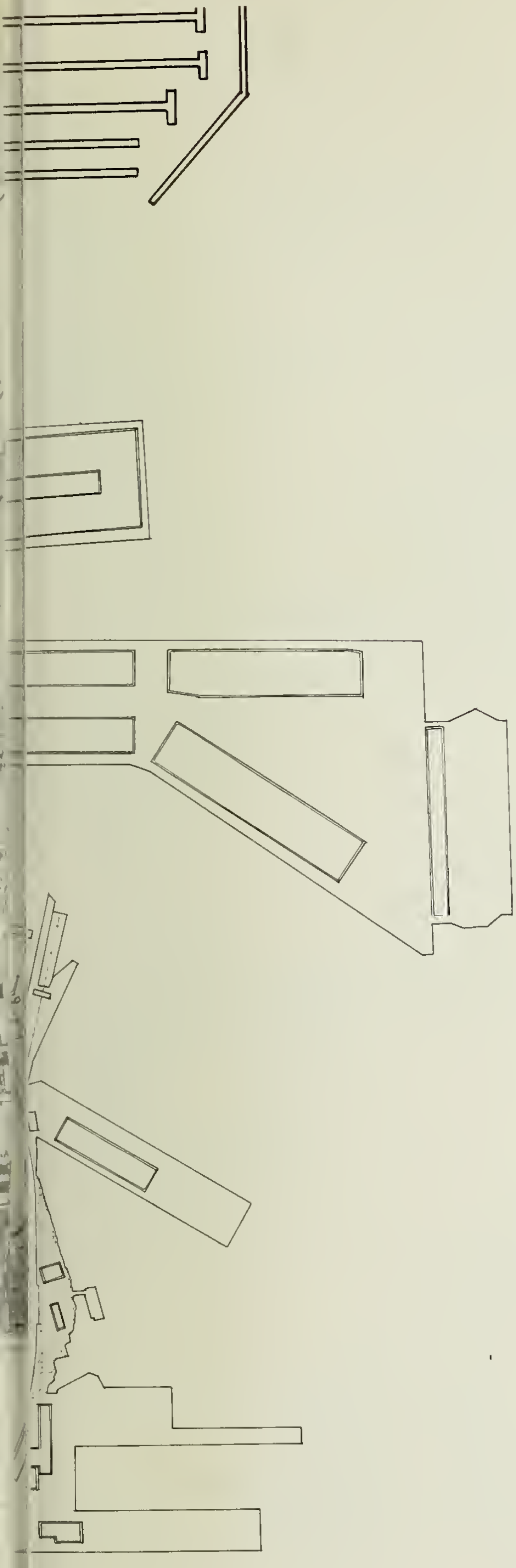
The figures in this section show city parks and public open spaces with their service areas, the location of public swimming pools and beaches, the location of public gyms and recreation centers, and comparative sizes of open spaces at the same scale as the illustrative plans of this report.

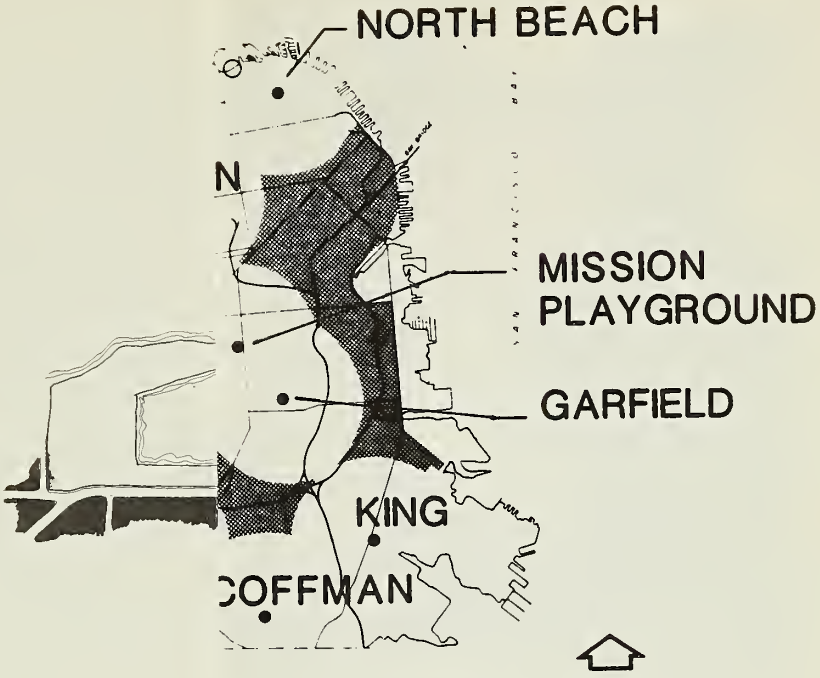
There are about 217 Recreation and Park Department facilities in the City. City parks total about 3,320 acres including the 1,017-acre Golden Gate Park, the 700-acre Lake Merced, the 317-acre McLaren Park, the 200-acre Lincoln Park, and the 75 acre Zoo. The following table shows the per capita population served by various existing athletic facilities:

Facility	Number of Facilities	Population Served per Facility
Tennis Courts	156	4,700
Baseball	25	29,000
Softball	57	12,700
Basketball	88	8,200
Soccer	13	55,800
Recreation Center/Gym	12	60,400

*For purposes of this computation, the San Francisco population is assumed to be 725,000.



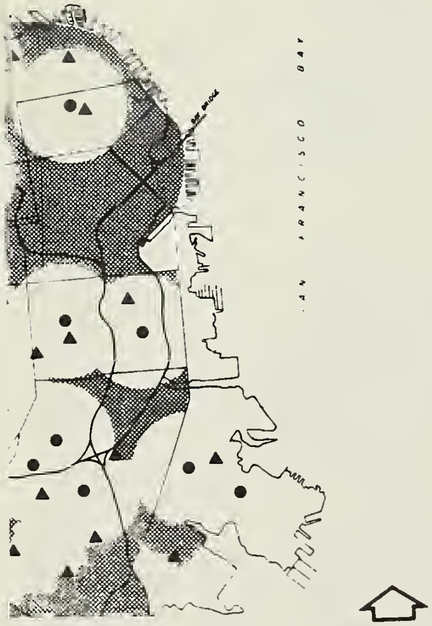



NORTH BEACH
N
MISSION
PLAYGROUND
GARFIELD
KING
COFFMAN
SAN FRANCISCO BAY

ARTMENT SWIMMING POOL

FROM POOL

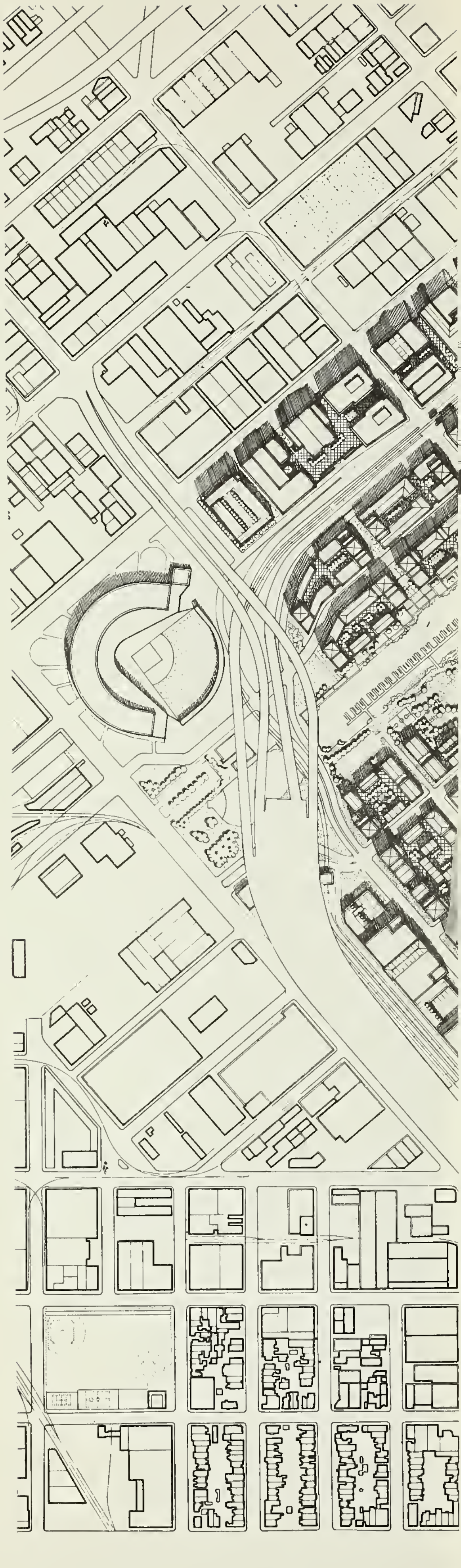
MING POOLS & BEACHES


SAN FRANCISCO BAY

T GYM OR REC CENTER
REC OR PARK DEPT. GYM OR REC CENTER
CHOOL SITE WITH GYM
ON TO PERMIT MORE COMMUNITY USE

& RECREATION CENTERS

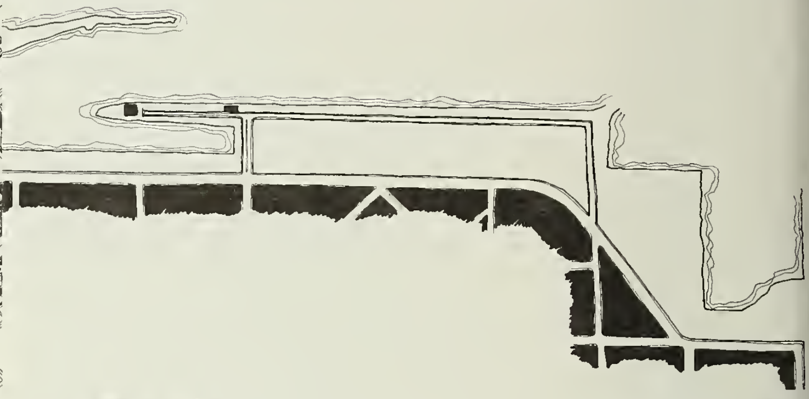
June 1985 San Francisco Dept. City Planning



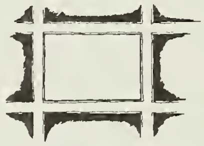
Open Space Comparison

Mission Bay

The following San Francisco Open Spaces are shown at the same scale as The Illustrative Plan

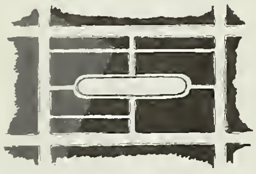


Marina Green

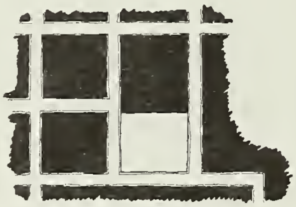


Union Square

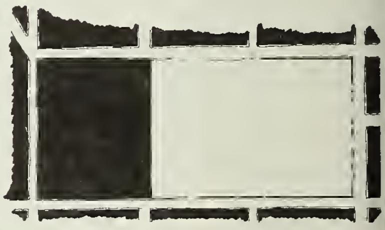
Washington Square



South Park

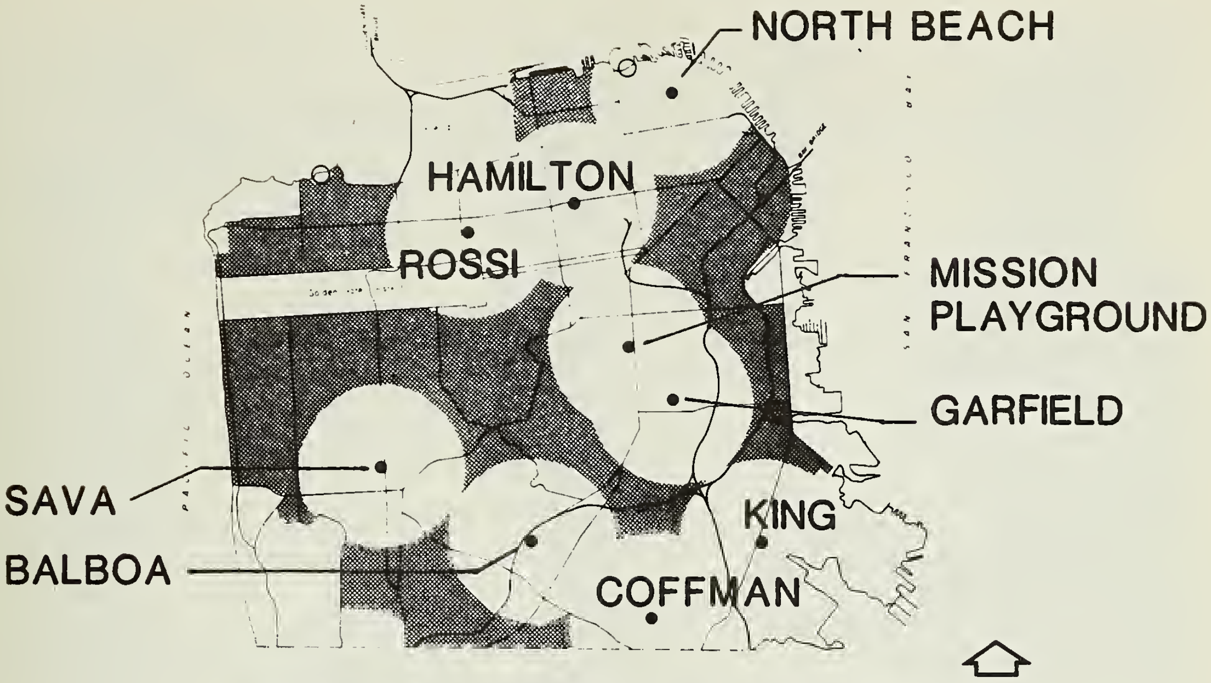


Sidney Walton Park



Funston Park

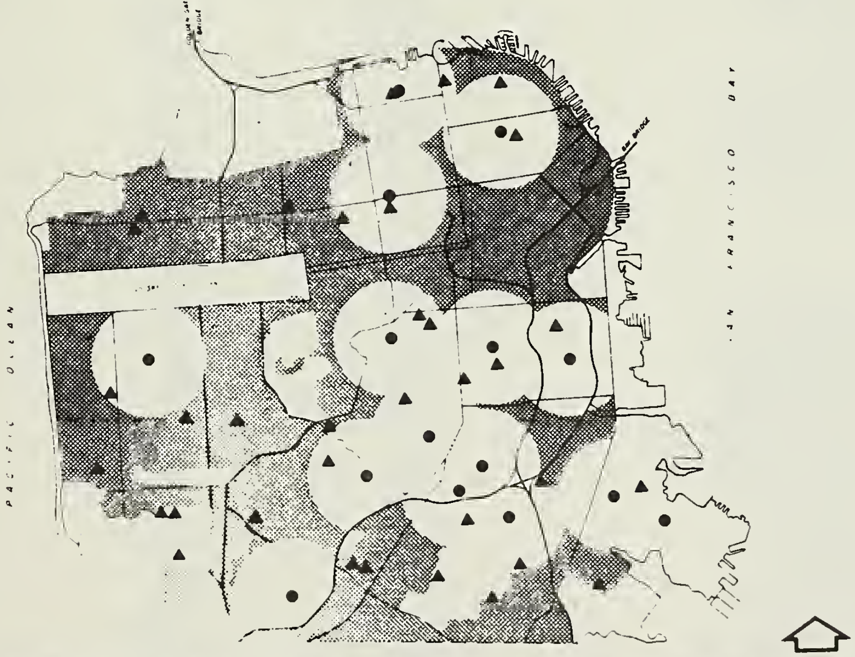
0
200'
1000'
NORTH


NORTH BEACH
HAMILTON
ROSSI
MISSION PLAYGROUND
GARFIELD
SAVA
BALBOA
KING
COFFMAN
PACIFIC OCEAN
SAN FRANCISCO BAY

● RECREATION & PARK DEPARTMENT SWIMMING POOL
○ SWIMMING BEACH
▨ AREA MORE THAN 1 MILE FROM POOL

Figure 3

LOCATION OF PUBLIC SWIMMING POOLS & BEACHES


PACIFIC OCEAN
SAN FRANCISCO BAY

● RECREATION & PARK DEPARTMENT GYM OR REC CENTER
▨ AREA MORE THAN 3/4 MILE FROM REC OR PARK DEPT. GYM OR REC CENTER
▲ S.F. UNIFIED SCHOOL DISTRICT SCHOOL SITE WITH GYM
PROPOSE GREATER COORDINATION TO PERMIT MORE COMMUNITY USE

Figure 4

LOCATION OF PUBLIC GYMS & RECREATION CENTERS

Source: Open Space Proposal for Citizen Review June 1985 San Francisco Dept. City Planning

STREETS

The following table provides street widths for selected streets throughout the City.

Street	Total Width	Curb-To-Curb Width	Sidewalk Width
Elizabeth at Church	35	21	7 each side
Ellsworth at Courtland	39.6	25.6	7 each side
Clay at Leavenworth	49	29	10 each side
Holloway at Miramar	60	36	12 each side
Leland at Bayshore	60	36	12 each side
Courtland at Ellsworth	60	40	10 each side
Capp at 21st Street	60	42	9 each side
Ingalls at Shafter	64	34	15 each side
Twenty-First Street at Mission	64	34	15 each side
Twenty-Fourth Street at Castro	64	40	12 each side
Twentieth Street at De Haro	66	42	12 each side
Twenty-Fourth Street at Kansas	66	42	12 each side
Stockton at Greenwich	66.7	36.7	15 each side
Green at Grant	67.3	37.3	15 each side
Green at Leavenworth	68.5	38.5	15 each side
Broderick at Northpoint	68.8	38.8	15 each side
Northpoint at Broderick	68.8	38.8	15 each side
Leavenworth at Clay	68.8	38.8	15 each side
Pierce at Pacific	68.8	38.8	15 each side
Union at Divisadero	68.8	38.8	15 each side
Stanyan at Parnassus	68.8	38.8	15 each side
Parnassus at Stanyan	68.9	38.9	15 each side
Pacific at Pierce	68.9	38.9	15 each side
Miramar at Holloway	70	40	15 each side
Seventh Avenue at Anza	70	40	15 each side
Greenwich at Stockton	70.3	40.3	15 each side
Guerrero at 19th Street	78	60	9 each side
Oakdale at Keith	80	35	30 north side 15 south side
Anza at 7th Avenue	80	50	15 each side
De Haro at 20th Street	80	50	15 each side
Kansas at 24th Street	80	50	15 each side
Minnesota at 25th Street	80	50	15 each side
Moraga at 19th Avenue	80	50	15 each side
Sixteenth Street at Dolores	80	50	15 each side
Sixteenth Street at Potrero	80	50	15 each side
Clement at 6th Avenue	80	54	13 each side
Duboce at Sanchez	80	56	12 each side
Ocean at Phelan	80	60	10 each side
Sanchez at 19th Street	82	44	19 each side
Divisadero at Union	82.5	44.5	19 each side
Church at 16th Street	82.5	62.5	10 each side
Castro at 18th Street	82.6	58.6	12 each side

South Van Ness at 21st Street	82.6	58.6	12 each side
Masonic at Fulton	100	56	22 each side
West Portal at Vicente	100	76	12 each side
Lombard at Broderick	100	80	10 each side
Nineteenth Avenue at Moraga	100	81	9.5 each side
Potrero at 16th Street	100	82	9 each side
Geneva at Paris	101	74	15 north side 12 south side
Webster at Eddy	110	92	9 each side
Sunset at Moraga	119.4	75.4	25 east side 19 west side
Market at 4th Street	120	53	33.5 each side
Dolores at 16th Street	120	76	22 each side
Market at Church	120	88	16 each side
Van Ness at Sutter	125	93	16 each side
Geary at Webster	147	127	10 each side
Nineteenth Avenue at Holloway	158	138	10 each side

Note: Total Width = Property line to property line

Source: S. F. Department of Public Works
Traffic Engineering Bureau
& Maps and Surveys

BB/12-02-86

Appendix 3: Affordable Housing Production

Affordable Housing Production

Costs (By Income and Unit Size)

Unit Size (Area sq. ft.)	Studio (500 sq. ft.)	1 Bed (650 sq. ft.)	2 Bed (850 sq. ft.)	3 Bed (1,000 sq. ft.)
Production Cost[1]	$70,000/ $140 sq. ft.	$90,000/ $138 sq. ft.	$110,000/ $130 sq. ft.	$135,000/ $135 sq. ft.
Household Size (persons)	1	2	3	4
Household Rent/Incomes[2]				
Low Income (50%)	$317/$12,705	$363/$14,520	$408/$16,355	$453/$18,150
Lower Income (80%)	$508/$20,328	$580/$23,232	$653/$26,136	$726/$29,040
Median Income (100%)	$635/$25,410	$725/$29,040	$816/$32,670	$907/$36,300
Moderate Income (120%)	$762/$30,492	$871/$34,848	$980/$39,204	$1,089/$43,500
% of Production Cost[3] carried by rent				
Low Income (50%)	47%	42%	38%	35%
Lower Income (80%)	76%	67%	62%	56%
Median Income (100%)	95%	84%	77%	70%
Moderate Income (120%)	114%	101%	93%	84%
Housing Subsidy Required, exclusive of land cost				
Low Income (50%)	$37,100	$52,200	$68,510	$87,750
Lower Income (80%)	$16,800	$29,700	$41,990	$59,400
Median Income (100%)	$ 3,500	$14,400	$25,415	$40,500
Moderate Income (120%)	-0-	-0-	$ 7,735	$21,600

---

[1] Estimated per Residence Element adjusted to 1986 costs (total unit cost).

[2] Rents are 30% of the HUD 1985 incomes by household size.

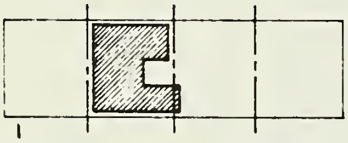
[3] That is for the amortization of the full unit production cost at 11% for 30 years.

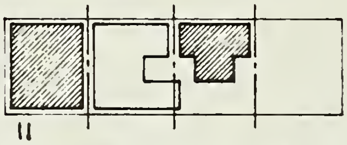
Appendix 4: Mission Bay Building Prototypes

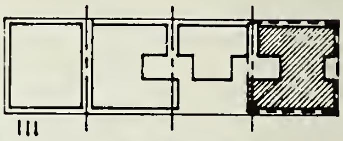
Representative prototypes have been extracted from the special study Commercial Building Prototypes, September 1986, prepared for the San Francisco Department of City Planning. These prototypes should be considered as individual examples illustrating one set of design conditions and not as examples illustrating the range of appropriate solutions. The prototypes study should be referred to for a complete description of historical precedent and design factors.

Prototype BB

BLOCK SUBDIVISION:	Quarter blocks
LOT COVERAGE/OPEN SPACE:	75% / 25%
SITING:	Four buildings forming courtyards connected to a public plaza on the south. Parking structure on west end of block.
PHASING: I.	285,000 sf office/surface parking.
II.	138,000 sf office/separate parking structure - 984 spaces.
III.	380,000 sf office/1/4 block parking-one level below grade.

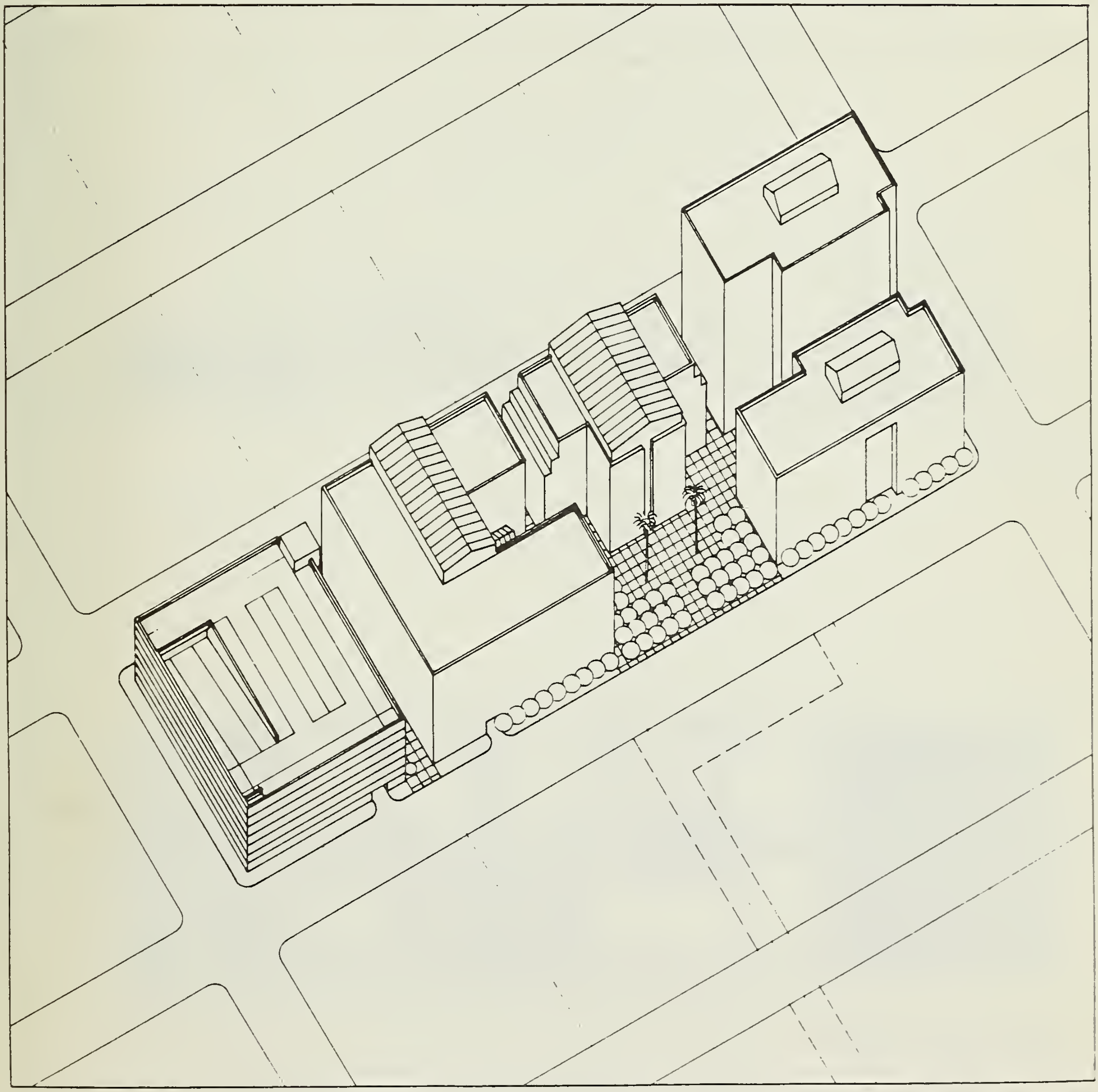






RELATIONSHIP TO GRADE:	Separate parking structure has 1/2 level below grade. There is one level of parking below grade on 1/4 of the block. All other buildings are on or above grade. Open space at grade.
PARKING CONFIGURATION:	Parking is in a separate structure of 8 levels, one partially below grade, 984 spaces @ 325 sf/space; and one below grade level on 1/4 of the site, 146 spaces @ 350 sf/space. Total = 1,130 spaces; 1.4 spaces per 1,000 sf office/retail.
TOTAL FLOOR AREA:	804,000 sf
TYPICAL FLOOR PLATE AREA:	19,000 sf; 19,700 sf; 40,700 sf
BUILDING HEIGHT/FLOOR-TO-FLOOR:	Office: 12'-6"; Parking: 9'-0".
LEASE DEPTHS:	37'-50'
SUMMARY COMMENTS:	Prototype BB is a revision of Prototype B. It adds a 12-story office tower on one corner supported by parking below grade. These structures could occur as a final phase of the development of the block allowing the decision about the feasibility of below-grade parking to be made late in the development process. Constructing parking below the office buildings at the east end of the site places a supply of parking near all four buildings. This scheme is, in all other respects, the same as Prototype B.

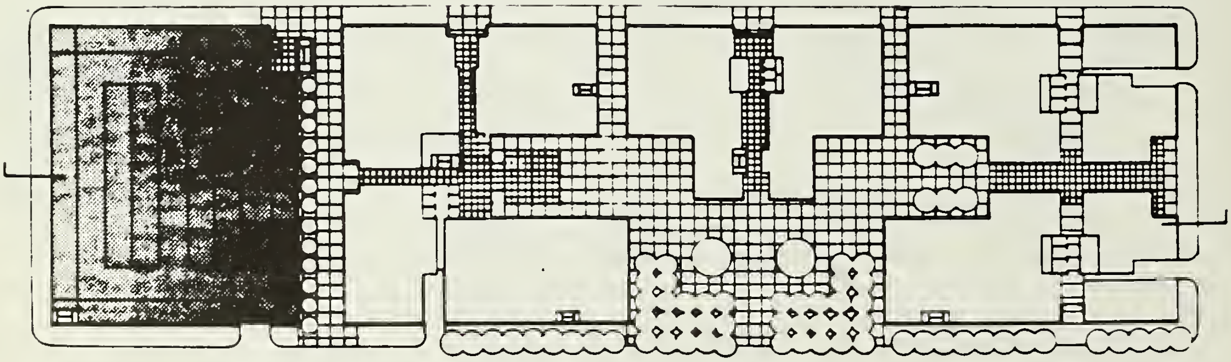
Prototype BB



Axonometric View

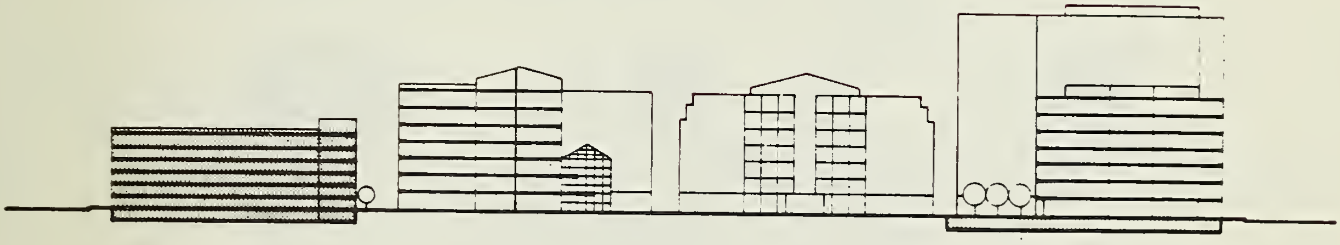
2.3 Prototypes

Prototype BB

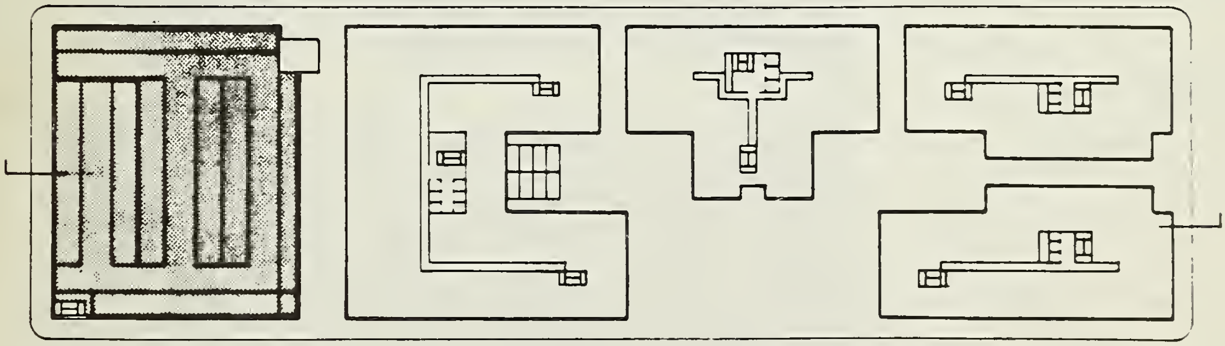


Ground Level Plan

Prototype BB



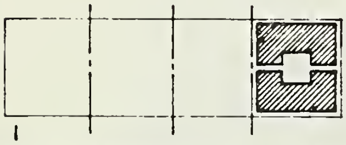
Section A-A

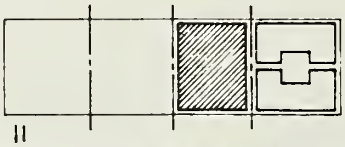


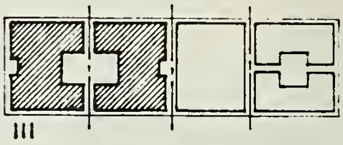
Typical Floor Plan

Prototype C

BLOCK SUBDIVISION:		Quarter blocks and half blocks
LOT COVERAGE/OPEN SPACE:		83% / 17%
SITING:		Three buildings at ends of the block with a parking structure at mid-block. Two through-block passages, one public courtyard.
PHASING:	I.	201,000 sf office/surface parking.
	II.	590,000 sf office/11,000 sf retail/836-space parking structure/325-space below grade parking level.

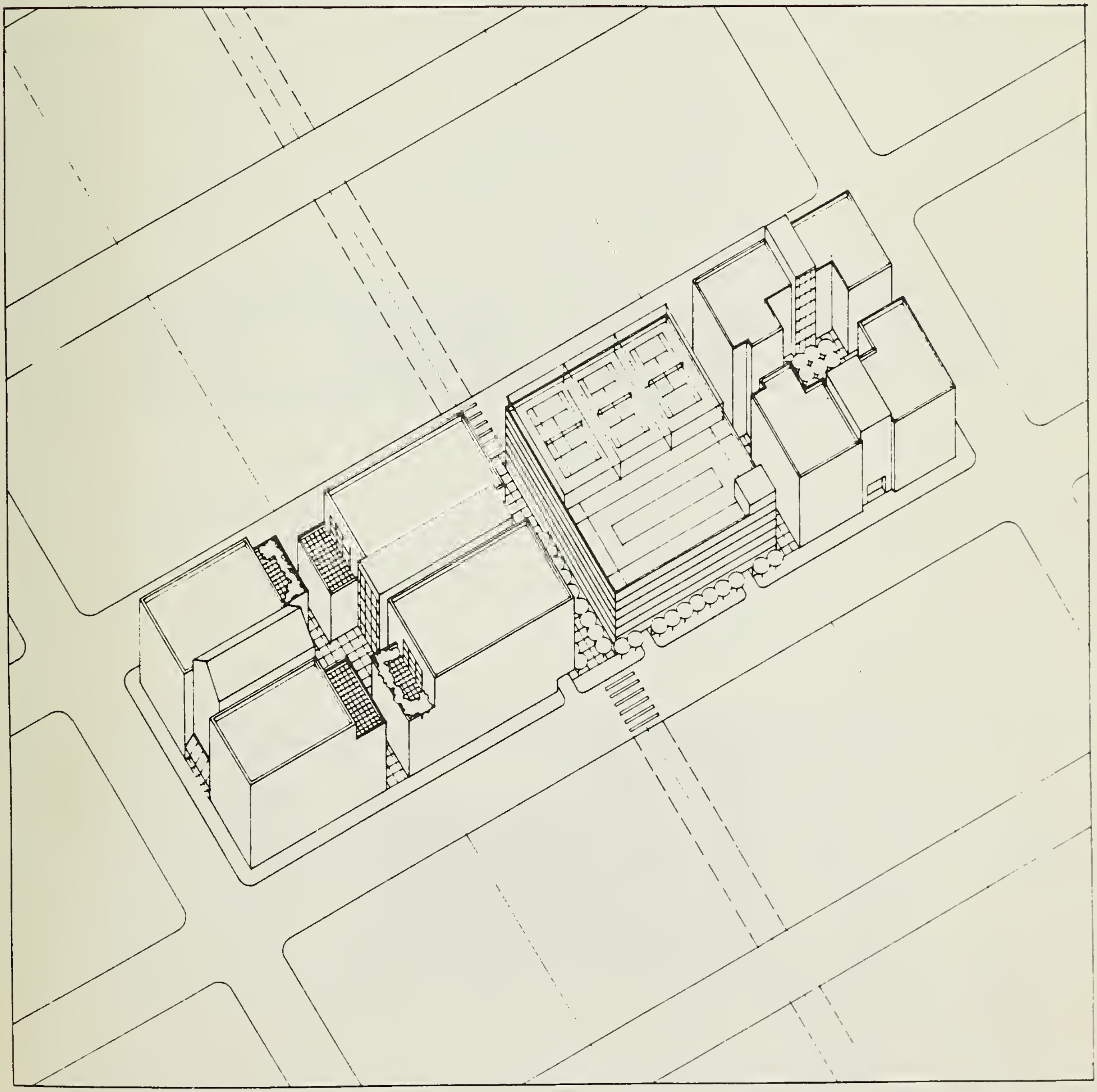






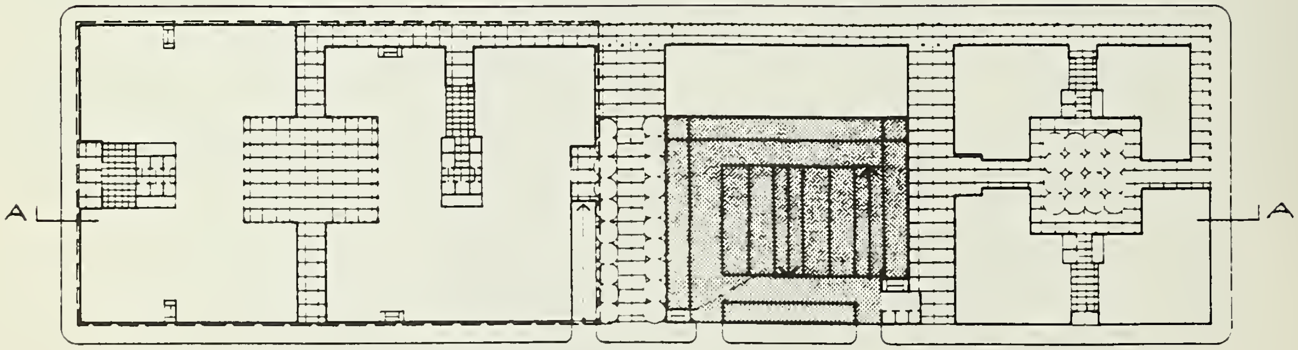
RELATIONSHIP TO GRADE:	One parking level below grade on 1/2 of the block; one level of above-grade parking structure at -3'. All other buildings on and above grade. Open space at grade.
PARKING CONFIGURATION:	Seven level parking structure with 836 spaces @ 325 sf/space. One below-grade parking level with 287 spaces @ 325 sf/space; 1.4 spaces per 1,000 sf office/retail.
TOTAL FLOOR AREA:	800,000 sf
TYPICAL FLOOR PLATE AREA:	15,000 sf; 42,000 sf
BUILDING HEIGHT/FLOOR-TO-FLOOR:	Building 1: 12'-0" over 15'-0" ground floor; Building 2: 12'-6"; parking: 9'-0" adjacent to and over 15'-0" retail space.
LEASE DEPTHS:	30'-70'
SUMMARY COMMENTS:	Prototype C breaks the block down into three through-block parcels. One of the mid-block parcels contains a seven-level parking structure with retail along the major street frontage and recreational uses on the roof. The parking is very convenient to the office buildings. This scheme achieves approximately 800,000 sf leasable space by limiting open space to 17% and placing one level of below grade parking on one-half the block. The open space is allocated to a street-level pedestrian retail arcade, two generous pedestrian passages and a courtyard accessible by the public.

Prototype C



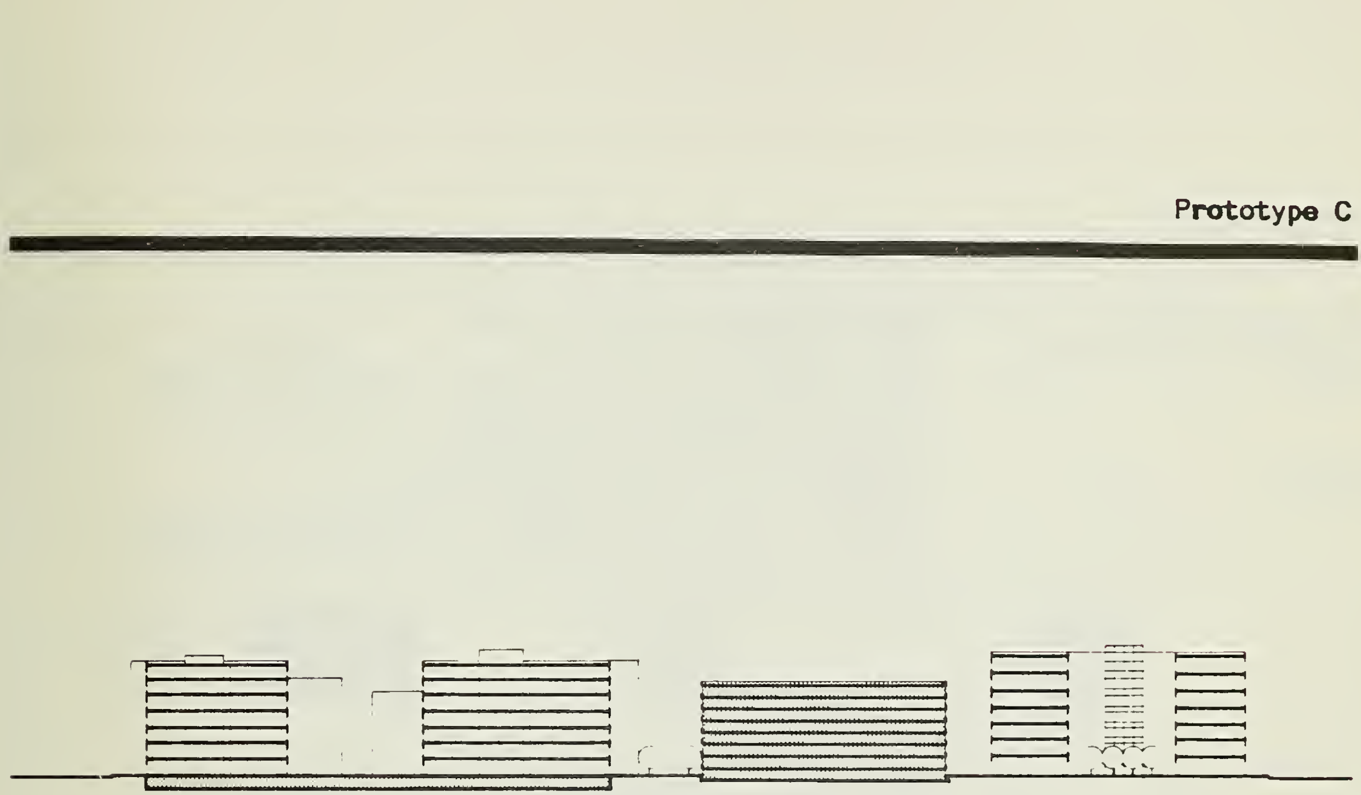
Axonometric View

Prototype C

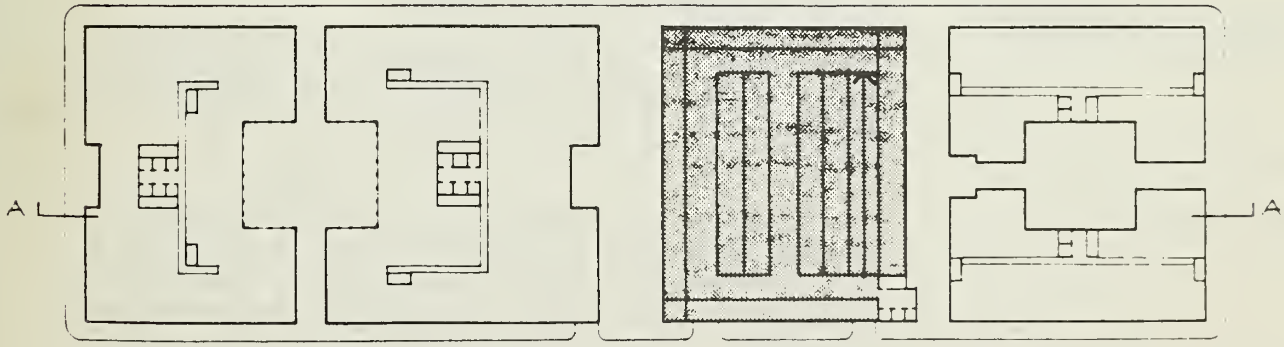


Ground Level Plan

Prototype C



Section A-A

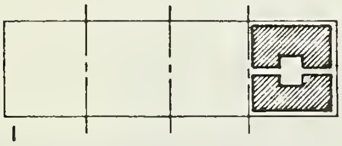


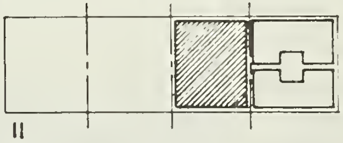
Typical Floor Plan

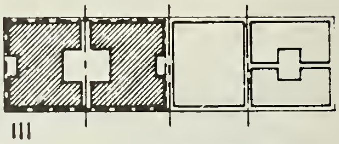
2.3 Prototypes

Prototype I

BLOCK SUBDIVISION:	Quarter blocks and half block
LOT COVERAGE/OPEN SPACE:	83% / 17%
SITING:	Three office buildings at ends of the block with a parking structure at mid-block. Two through-block passages, one public courtyard.
PHASING: I.	201,000 sf office/surface parking.
II.	688,000 sf office/11,000 sf retail/836-space parking structure/287-space below-grade parking level/137-space parking podium.

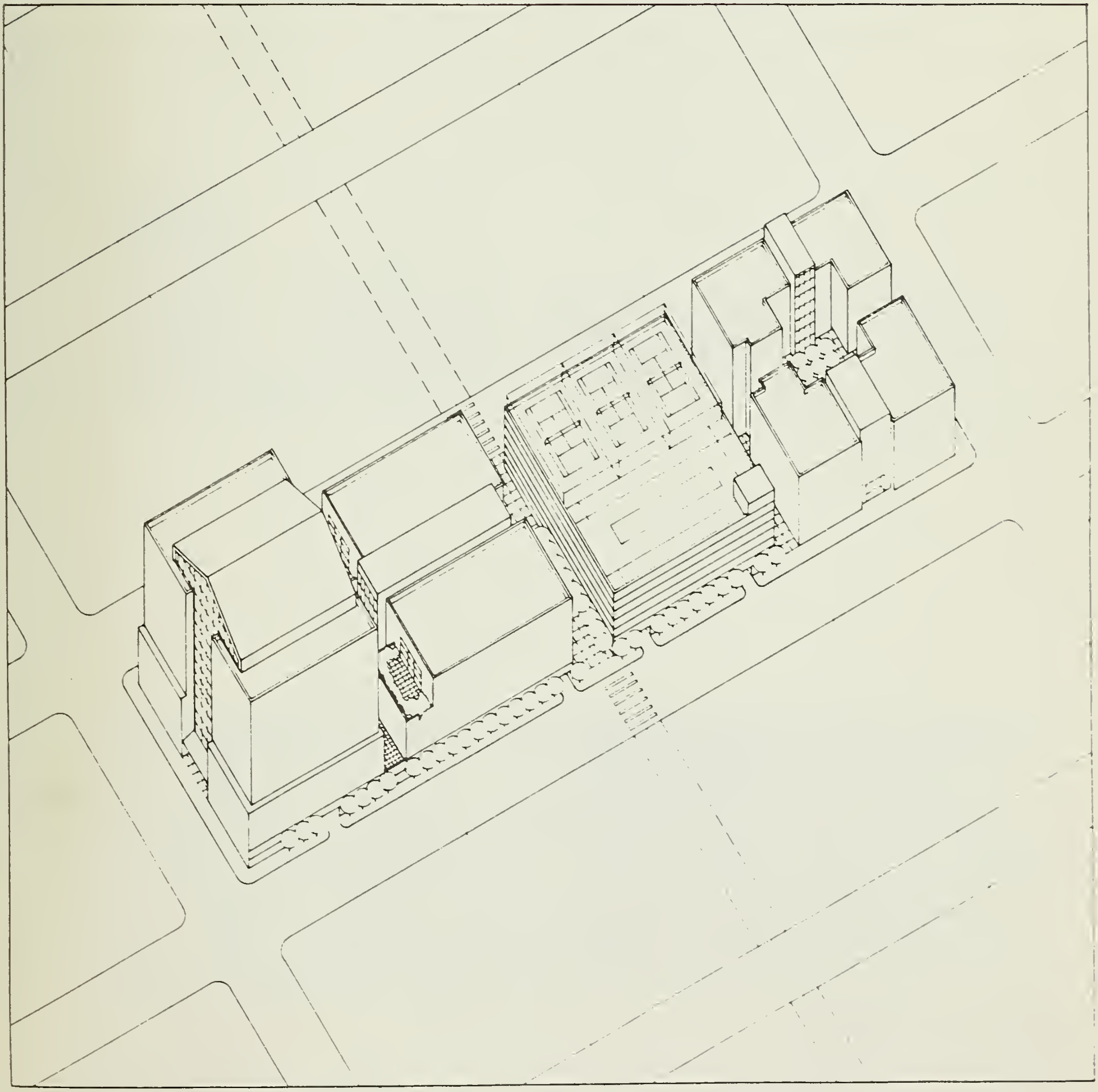

I


II


III

RELATIONSHIP TO GRADE:	One parking level below grade on 1/2 of the site; one level of above-grade parking structure at -3'. All other buildings on and above grade. Pedestrian passages on grade, public courtyard on parking podium, 18' above grade.
PARKING CONFIGURATION:	Seven-level parking structure with 836 spaces @ 325 sf/space. One below-grade level with 287 spaces @ 350 sf/space. Two levels in podium with 137 spaces @ 350 sf/space; 1.4 spaces per 1,000 sf office/retail.
TOTAL FLOOR AREA:	900,000 sf
TYPICAL FLOOR PLATE AREA:	15,000 sf; 42,000 sf; 35,000 sf
BUILDING HEIGHT/FLOOR-TO-FLOOR:	Building 1: 12'-0" over 15'-0" ground floor; Building 2: 12'-6"; parking: 9'-0" adjacent to and over 15'-0" retail space.
LEASE DEPTHS:	30'-70'
SUMMARY COMMENTS:	In Prototype CC, Scheme C is modified by adding a parking podium and a 13-story tower to Building 3. This approach produces approximately 900,000 sf leasable space while maintaining quarter-block divisions. In all other respects the prototype is the same as Scheme C.

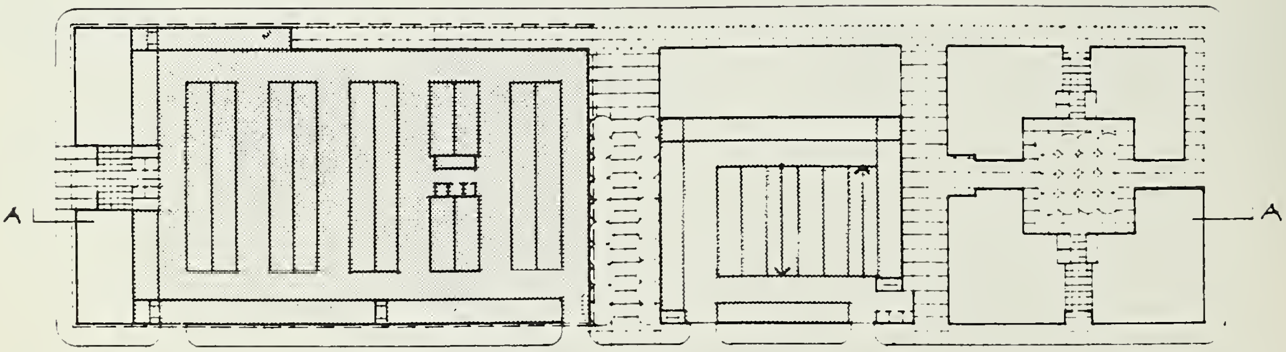
Prototype CC



Axonometric View

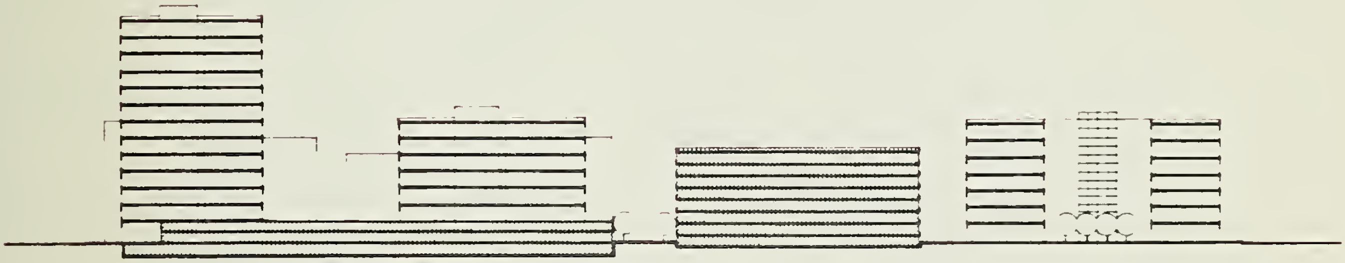
2.3 Prototypes

Prototype CC

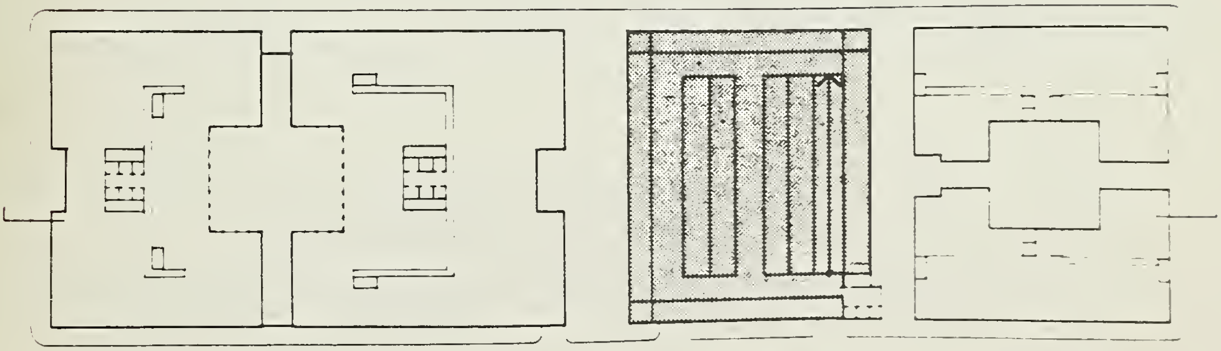


Ground Level Plan

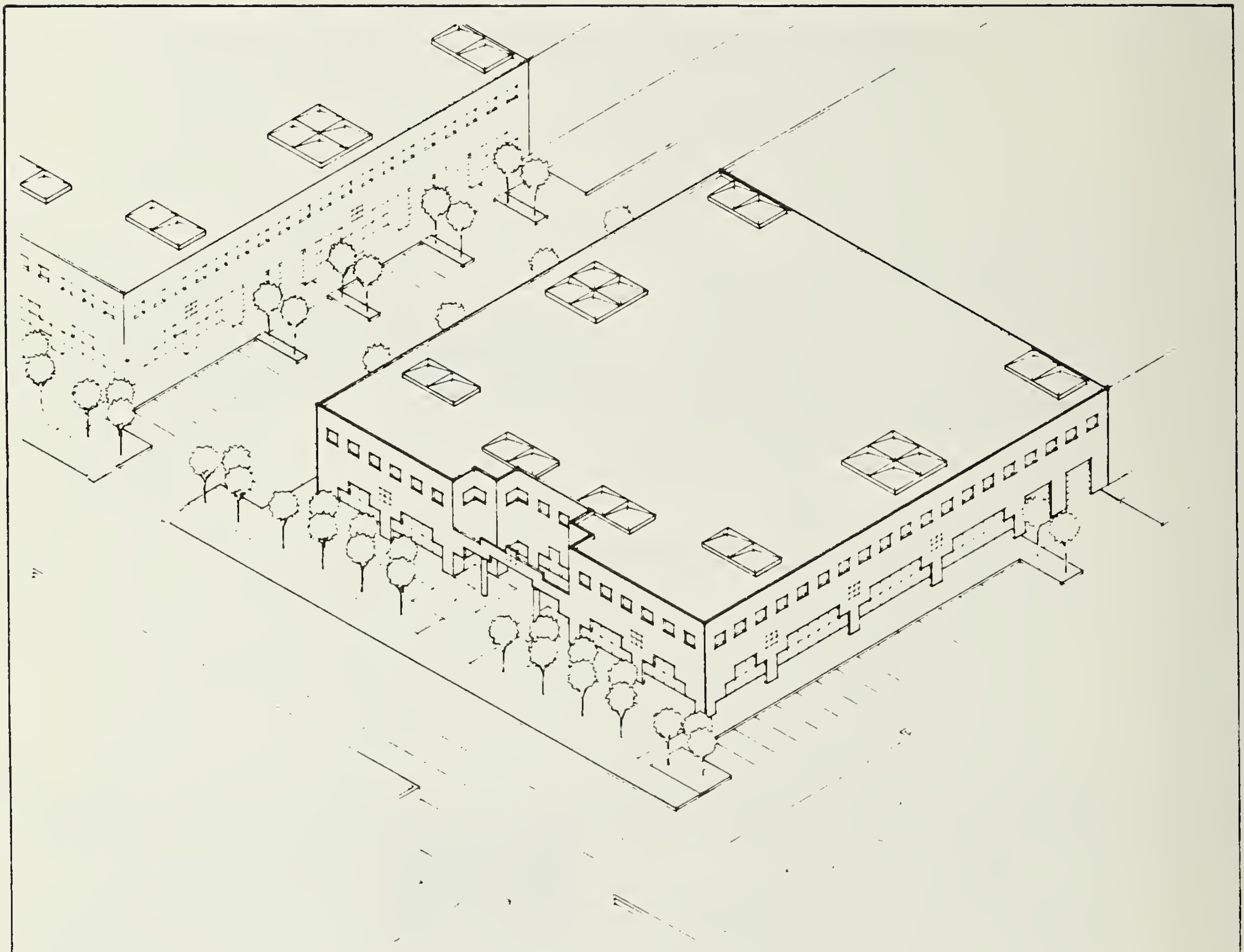
Prototype CC



Section A-A



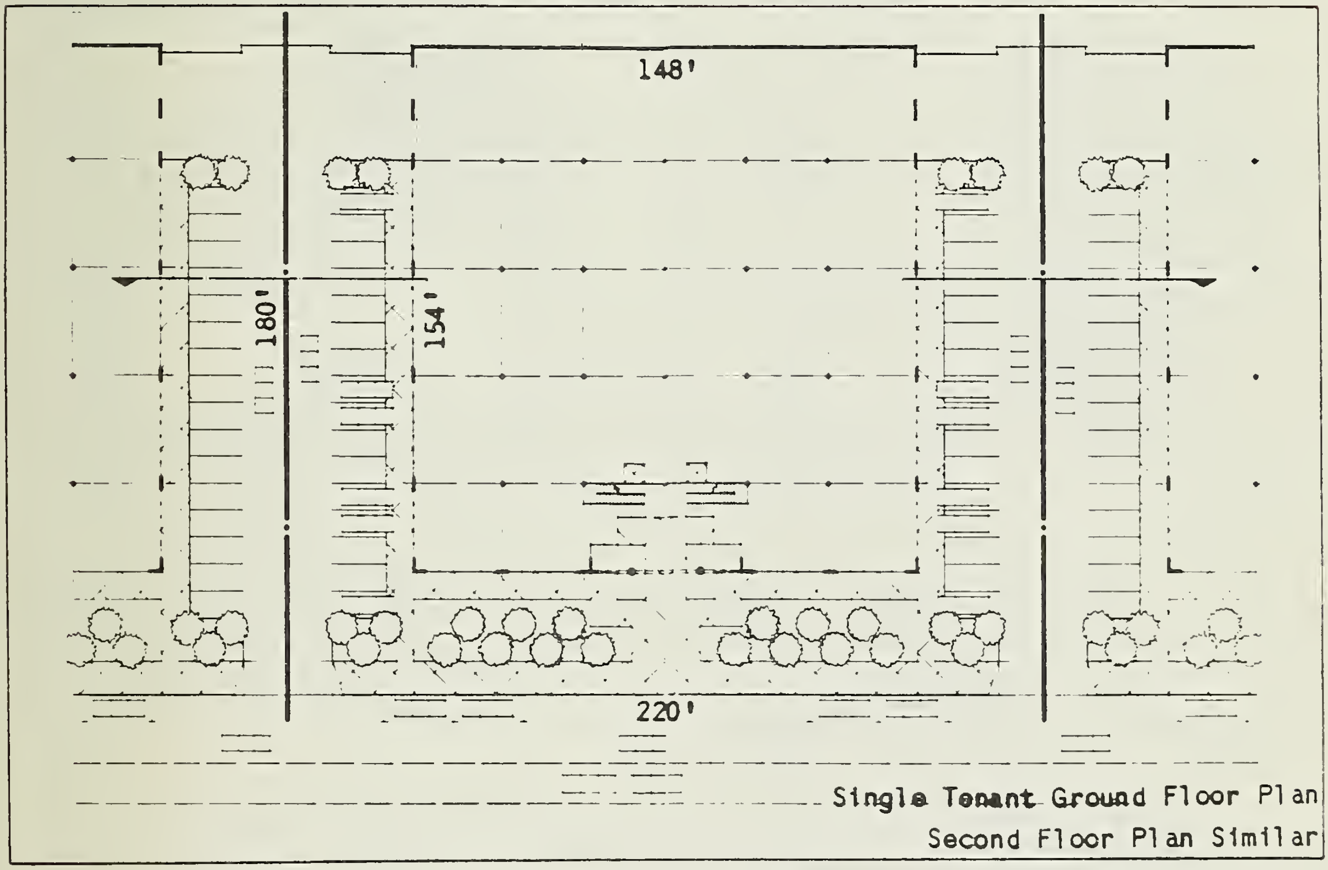
Typical Floor Plan



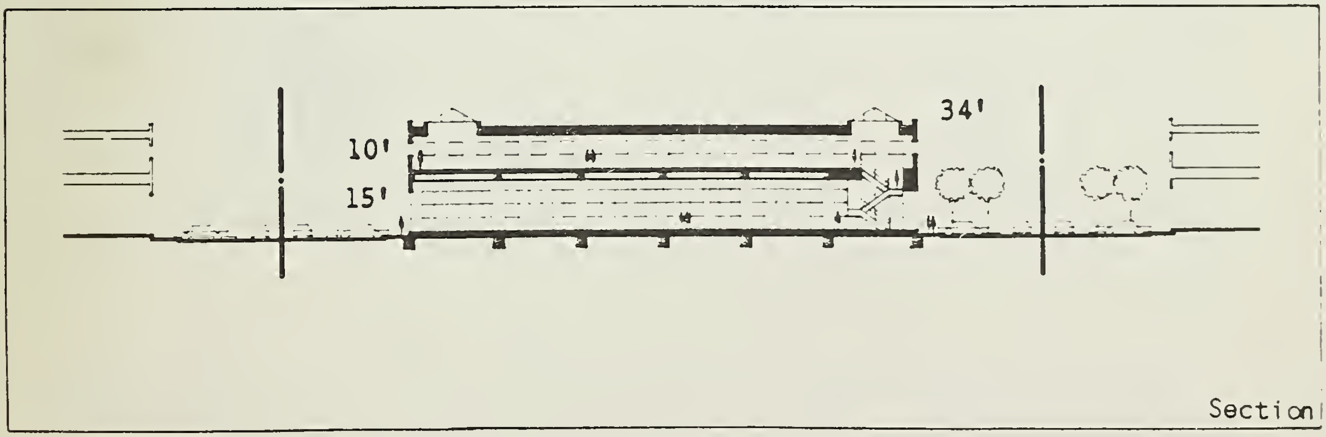
R & D / Low Density: View

RESEARCH & DEVELOPMENT AND LIGHT INDUSTRIAL USES

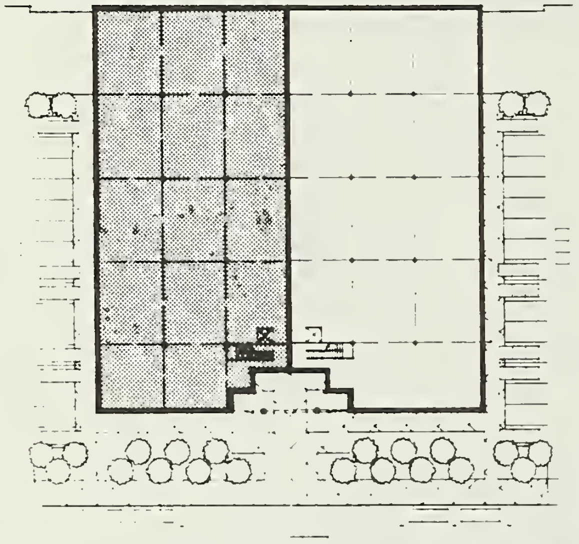
3.1 Research and Development


148'
180'
154'
220'

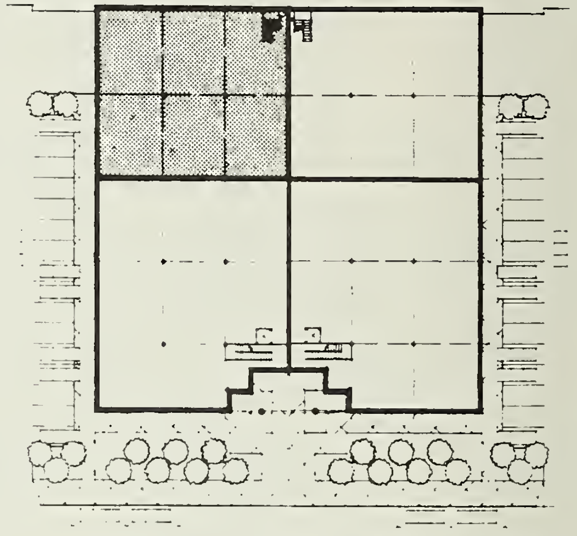
Single Tenant Ground Floor Plan
Second Floor Plan Similar



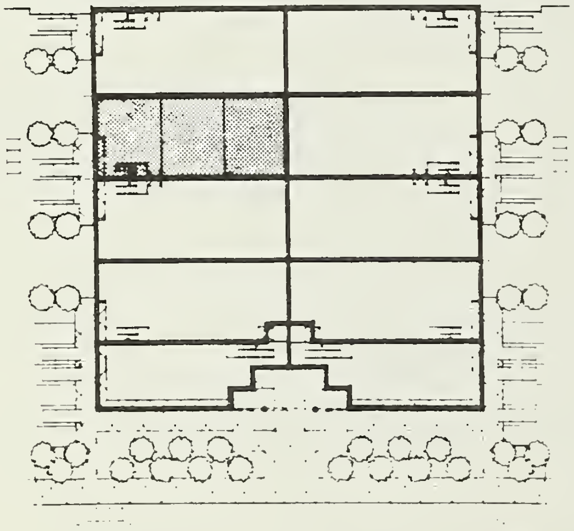
Section



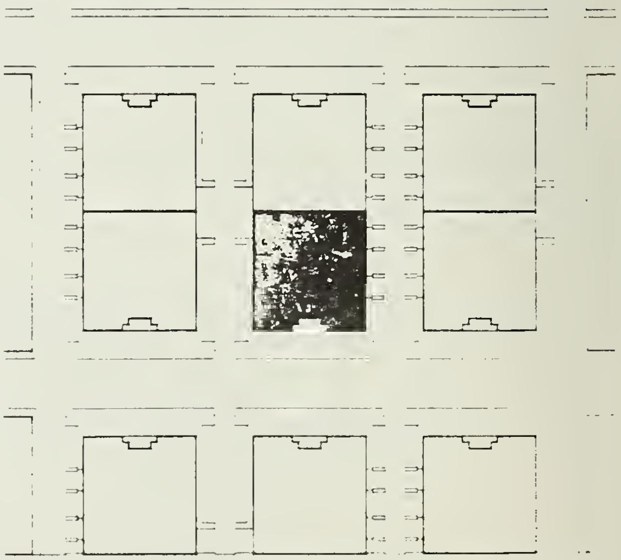
Subdivision Plan: 2 Tenants
22,216 Square Feet / User



Subdivision Plan: 4 Tenants
11,108 Square Feet / User



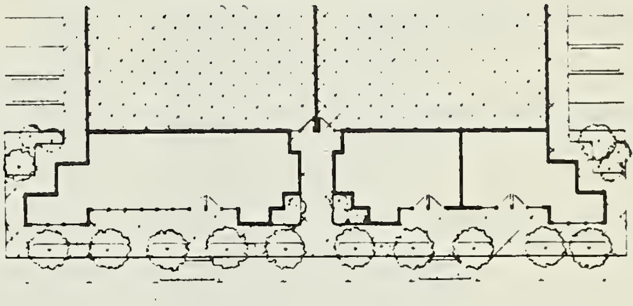
Subdivision Plan: Multi Tenants
4,443 Square Feet / User



Full Block Site Plan

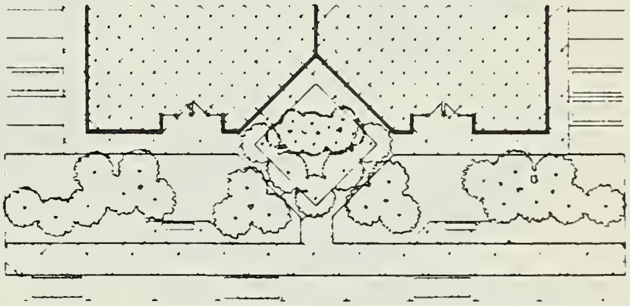
Buffer Plan No. 1

- * 3' parkway w/street trees
- * Sidewalk
- * Neighborhood retail uses
- * Prototypical R & D building w/30' front set back and shared recessed entry (for 2 tenants)



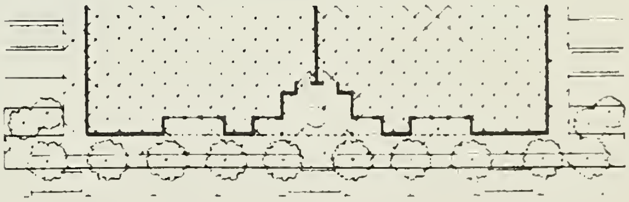
Buffer Plan No. 2

- * 6' sidewalk
- * 30' landscape area w/seating areas
- * Prototypical R & D building w/30' front setback and front entry (for 2 tenants)



Buffer Plan No. 3

- * 3' parkway w/street trees
- * 6' sidewalk
- * Prototypical R & D building w/zero setback and shared recessed entry (for 2 tenants)



RESEARCH & DEVELOPMENT AND LIGHT INDUSTRIAL USES

3.1 Research and Development

PROTOTYPE: R & D / High Density

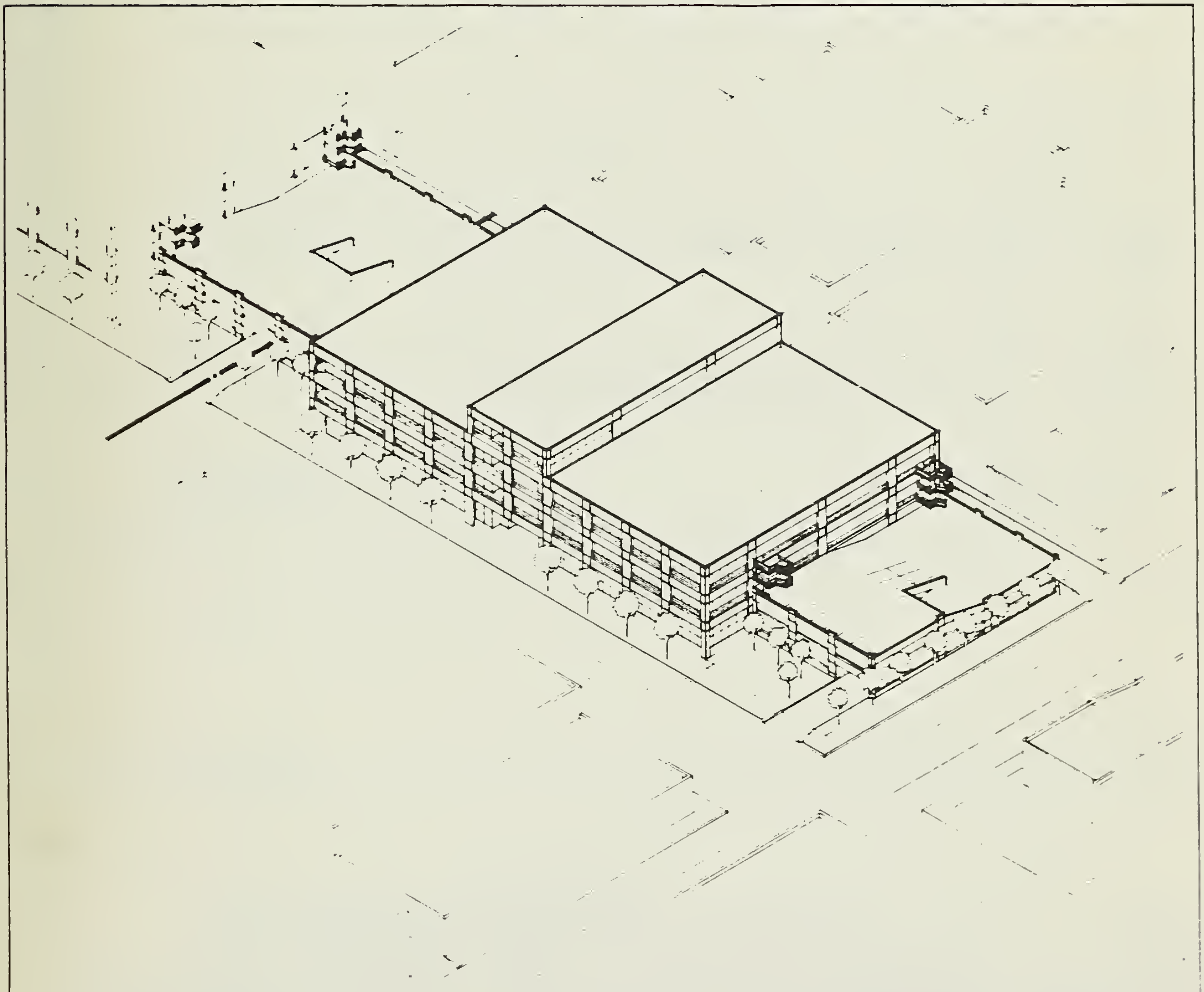
BUILDING PERCENTAGE LOT COVERAGE: 56%
USABLE OPEN SPACE: 10%
BLOCK SIZE: 785' x 340' (6.13 acres)
GROSS SQUARE FEET DEVELOPMENT PER ACRE: 76,346 square feet/acre
FLOOR AREA RATIO: 2.63
FRONT SETBACK: 5'
REAR SETBACK: 15'
SIDE SETBACK: 5'
PUBLIC LANDSCAPING: Street trees
PRIVATE LANDSCAPING: At parking garage entrances
PARKING LOCATION: Between buildings in parking structures
PARKING RATIO: 1:1115
PARKING SPACES: 105
NUMBER OF PARKING FLOORS: 3 levels

BUILDING FORM: Monolithic with partial fourth floor and attached parking within no atrium/courtyard
TOTAL LEASABLE FLOOR AREA: 117,000 square feet
TYPICAL FLOOR PLATE AREA: 54,000
TOTAL NUMBER OF FLOORS: 3 with penthouse
BUILDING HEIGHT: 65'
FLOOR-TO-FLOOR HEIGHT FIRST FLOOR: 18'
FLOOR-TO-FLOOR HEIGHT TYPICAL: 15'
LEASE DEPTHS: 70'

COMMENTARY: Possiblity of recreational uses on top of parking structure, landscape user to buffer parking.

RESEARCH & DEVELOPMENT AND LIGHT INDUSTRIAL USES

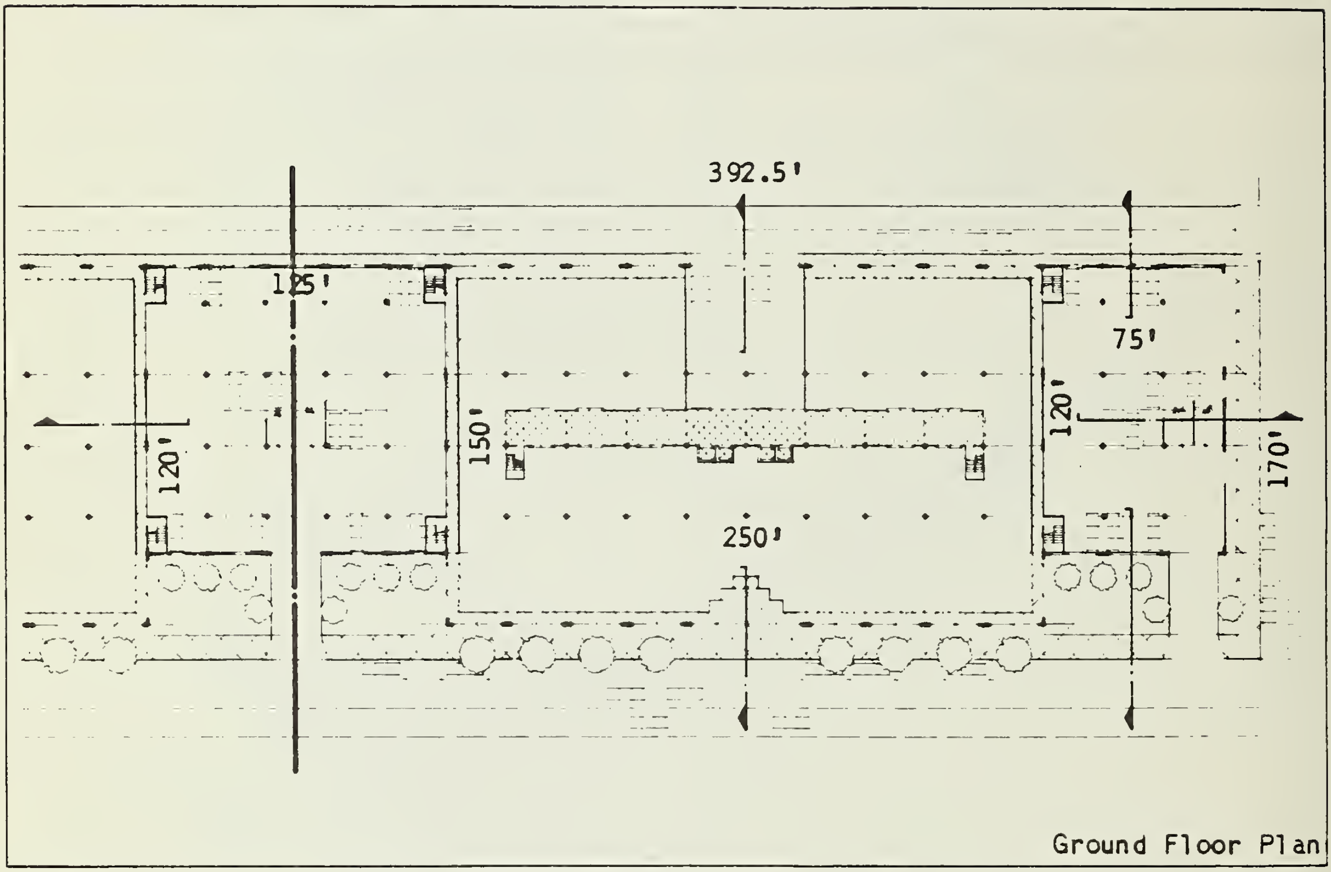
3.1 Research and Development



R & D / High Density: View

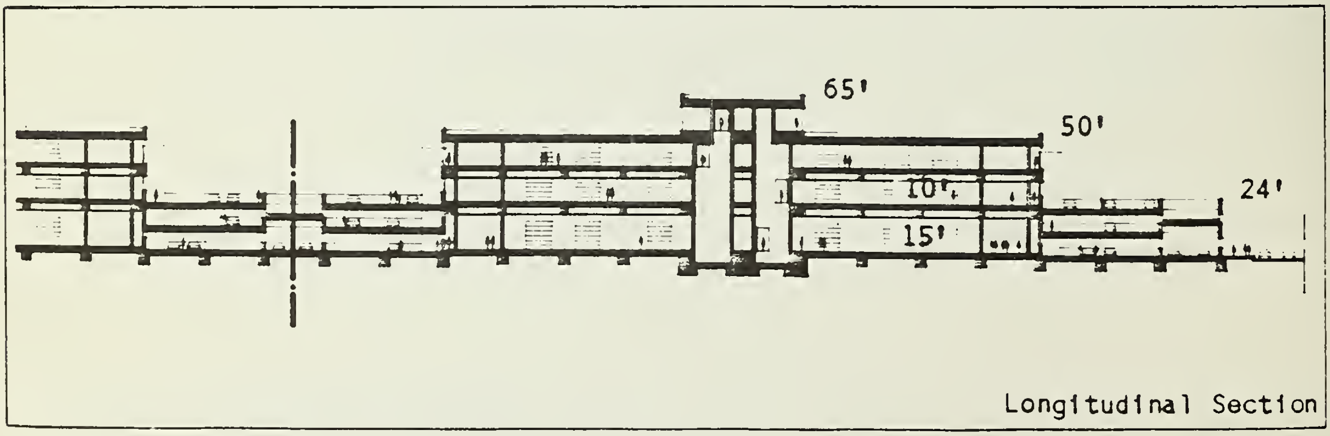
RESEARCH & DEVELOPMENT AND LIGHT INDUSTRIAL USES

3.1 Research and Development



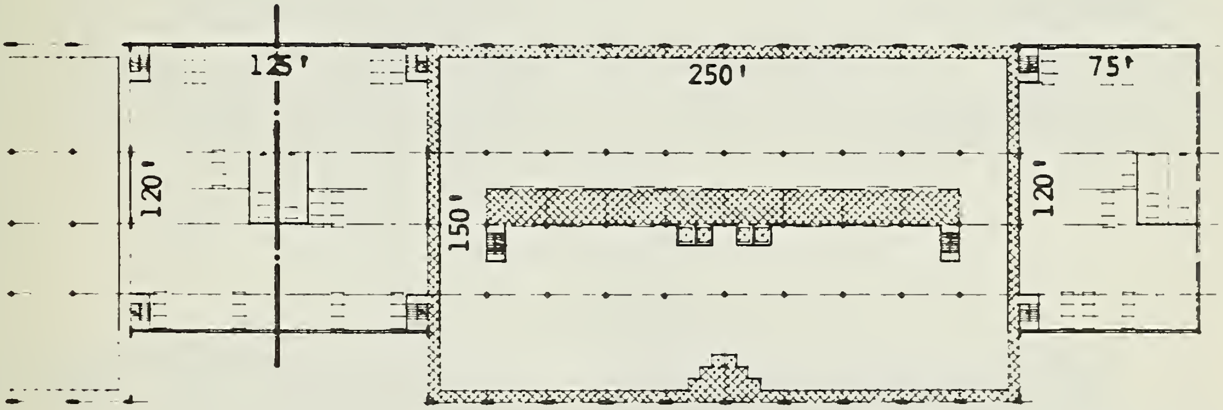
392.5'
125'
75'
120'
150'
120'
170'
250'

Ground Floor Plan

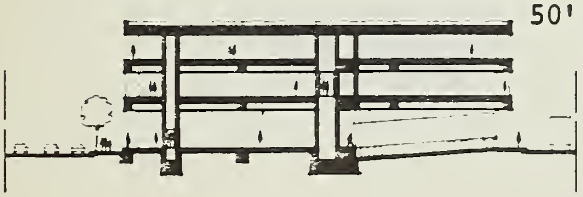


65'
50'
10'
15'
24'

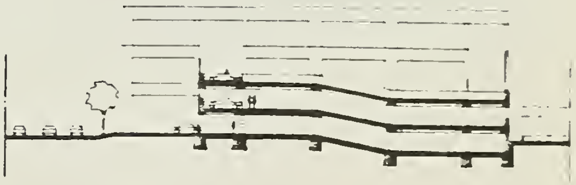
Longitudinal Section


125'
250'
75'
120'
150'
120'

Typical Upper Level Floor Plan



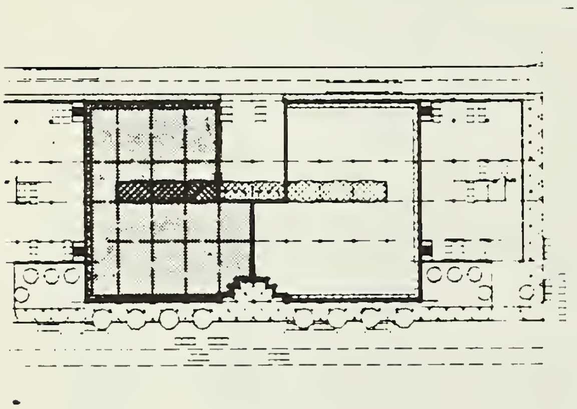
Transverse Building Section



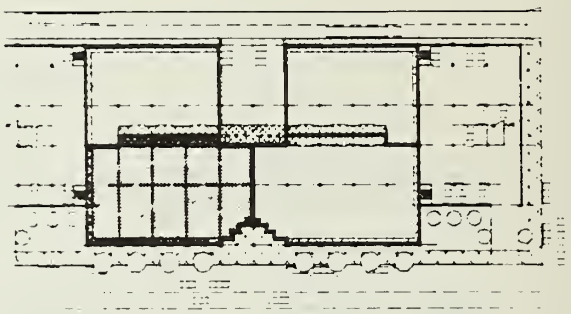
Transverse Parking Section

RESEARCH & DEVELOPMENT AND LIGHT INDUSTRIAL USES

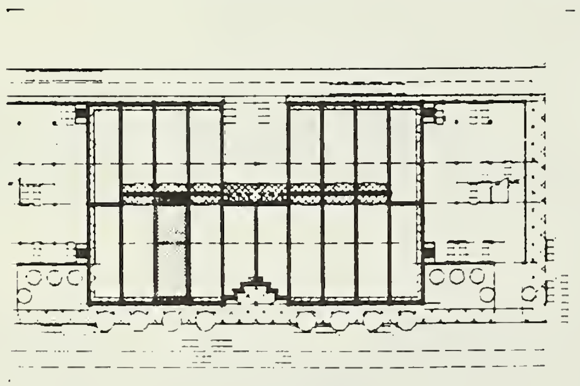
3.1 Research and Development



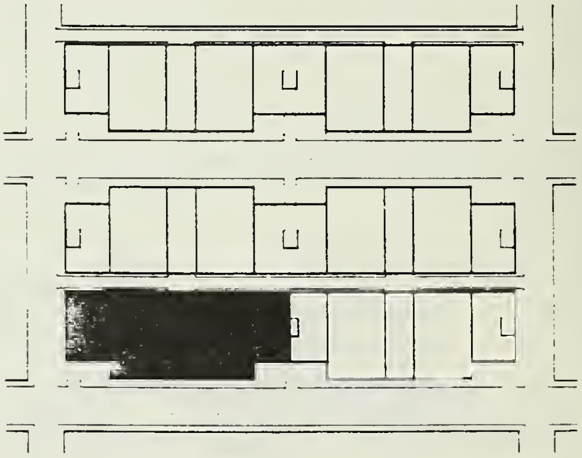
Subdivision Plan: 2 Tenants
18,250 Square Feet / User



Subdivision Plan: 4 Tenants
9,125 Square Feet / User



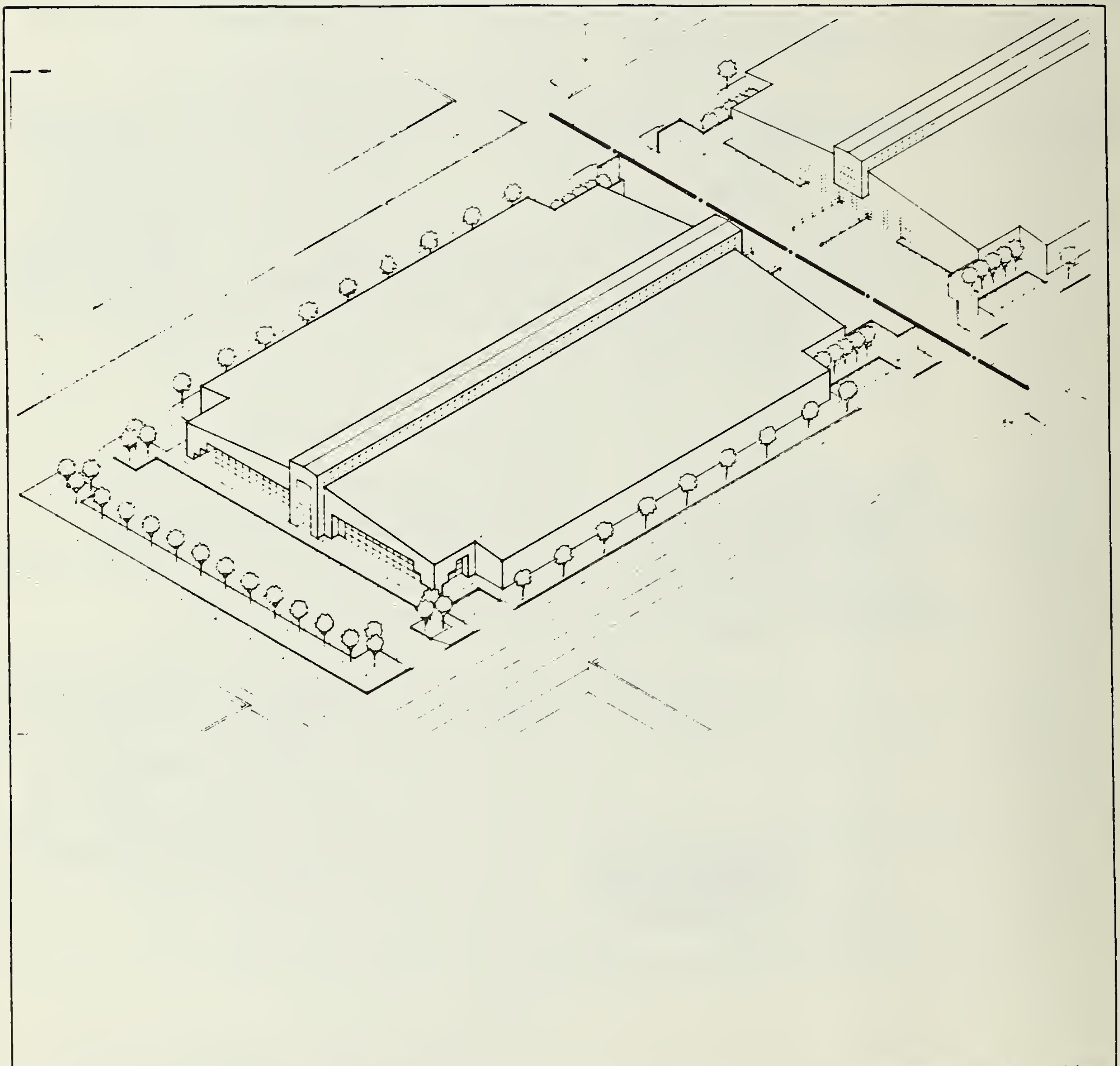
Subdivision Plan: Multi Tenants
1,875 Square Feet / User



Full Block Site Plan

3.2 Light Industrial Uses

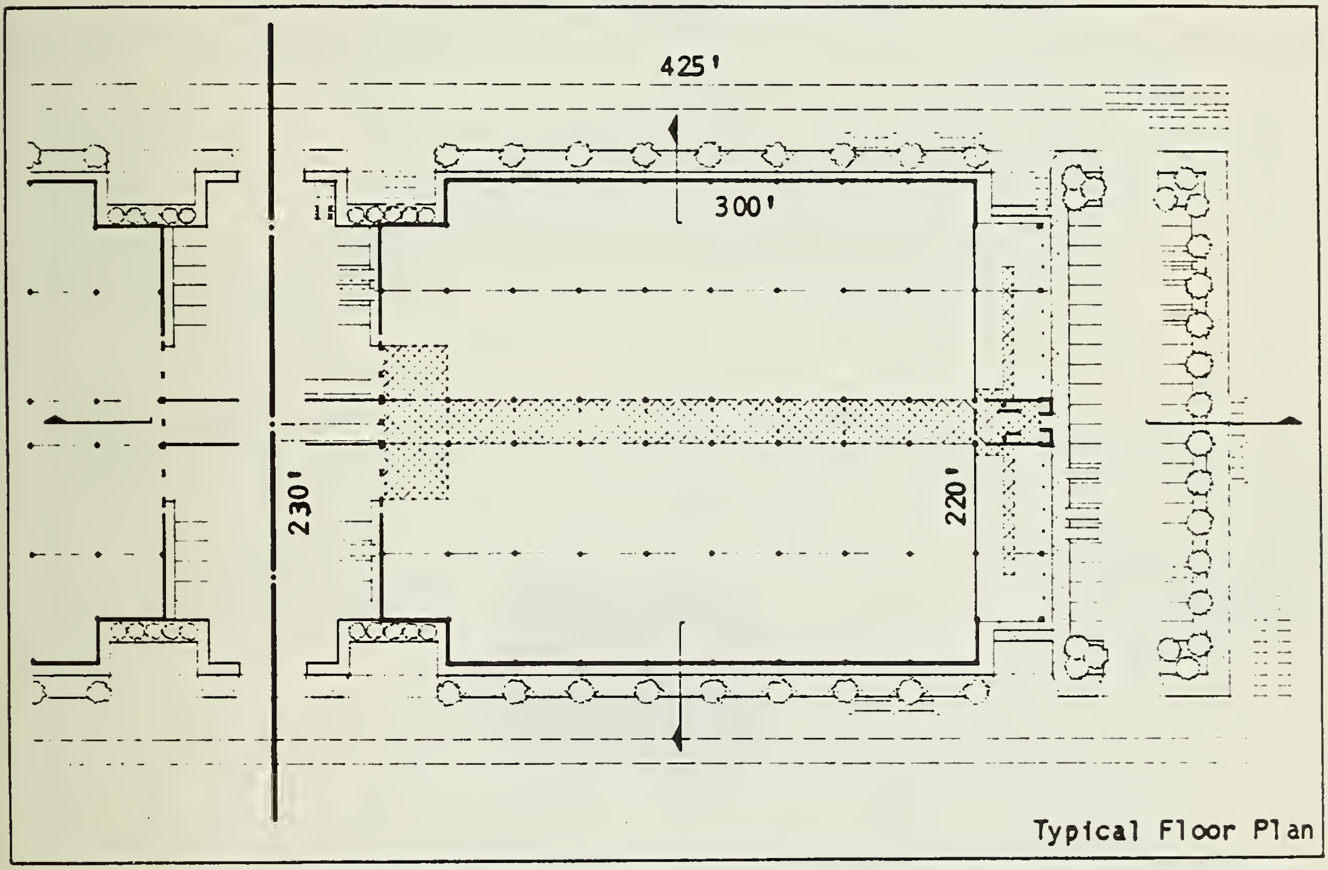
PROTOTYPE:	Light Industrial
BUILDING PERCENTAGE LOT COVERAGE:	71%
USABLE OPEN SPACE:	0%
BLOCK SIZE:	850' x 230' (4.50 acres)
GROSS SQUARE FEET DEVELOPMENT PER ACRE:	15,367 square feet/acre
FLOOR AREA RATIO:	0.71
FRONT SETBACK:	75'
REAR SETBACK:	50'
SIDE SETBACK:	5'
PUBLIC LANDSCAPING:	Street trees
PRIVATE LANDSCAPING:	Buffer parking and loading areas
PARKING LOCATION:	Surface lots
PARKING RATIO:	1:985
PARKING SPACES:	70
NUMBER OF PARKING FLOORS:	Surface
BUILDING FORM:	Monolithic without atrium/ courtyard
TOTAL LEASABLE FLOOR AREA:	69,000 square feet
TYPICAL FLOOR PLATE AREA:	63,600 square feet
TOTAL NUMBER OF FLOORS:	1 with mezzanine (8% of floor area)
BUILDING HEIGHT:	40'
CLEAR HEIGHT AT WORK AREA:	20' clear minimum
FLOOR-TO-FLOOR HEIGHT TYPICAL:	13' at office (in mezzanine)
LEASE DEPTHS:	110'
COMMENTARY:	Requires alley at rear for loading/ unloading.



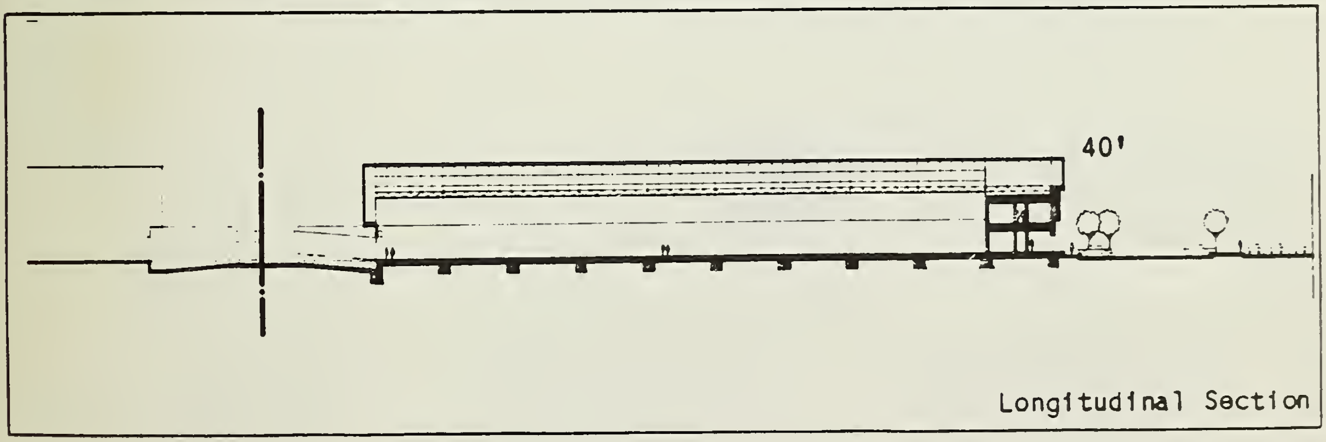
Light Industrial w/Office Mezzanine: View

RESEARCH & DEVELOPMENT AND LIGHT INDUSTRIAL USES

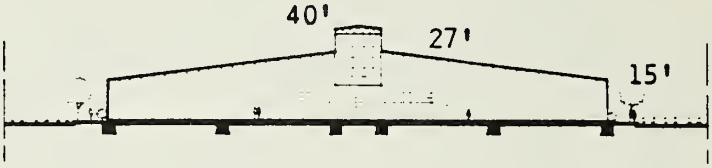
3.2 Light Industrial Uses


425'
300'
230'
220'

Typical Floor Plan



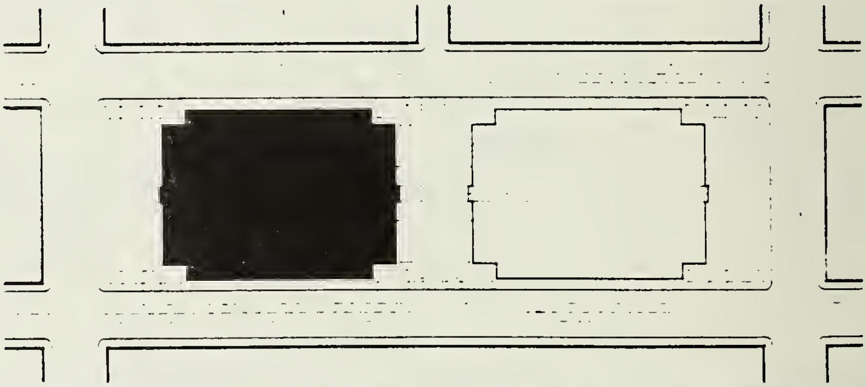
Longitudinal Section

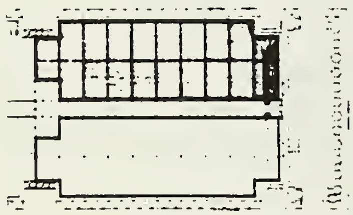


Transverse Section

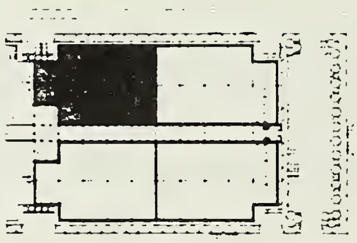
Site Plan

- * Shared parking
- * Shared loading facilities

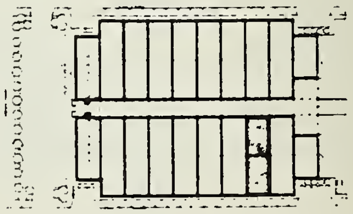




Subdivision Plan: 2 Tenants 34,500 Square Feet / User

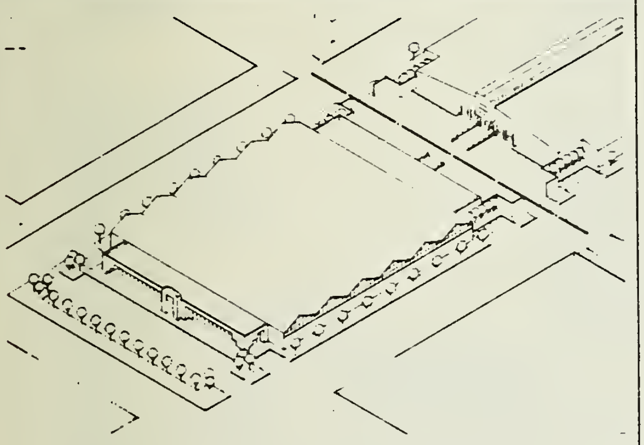


Subdivision Plan: 4 Tenants 17,250 Square Feet / User

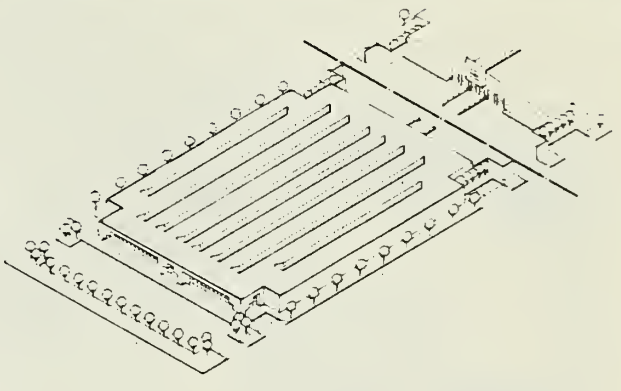


Subdivision Plan: Multi Tenants 3,300 Square Feet / User

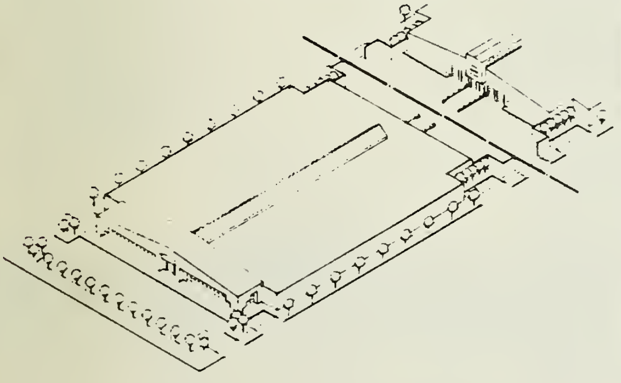
3.2 Light Industrial



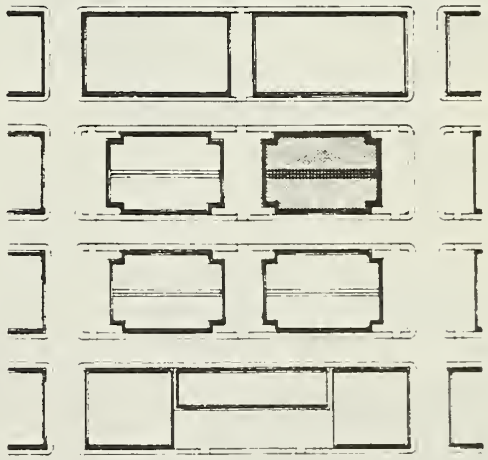
Roof Variation No. 1



Roof Variation No. 2

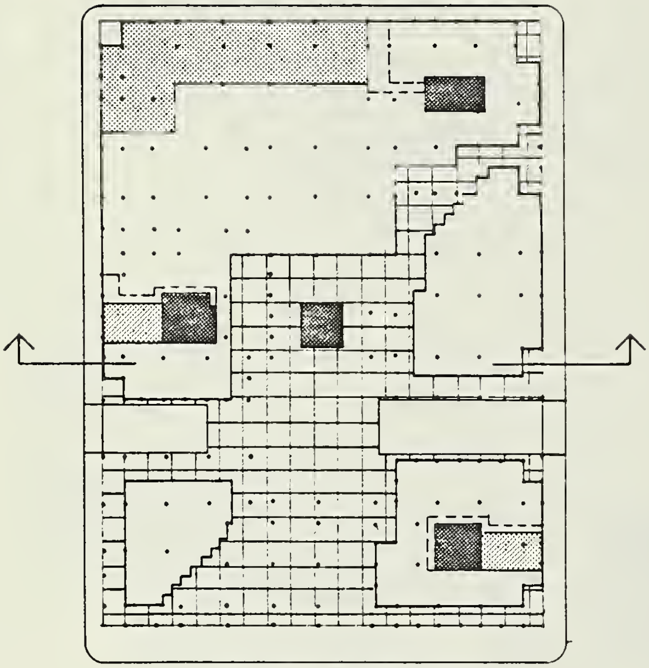


Roof Variation No. 3

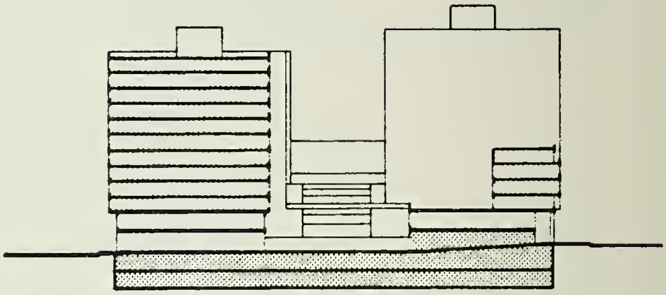


Full Block Site Plan

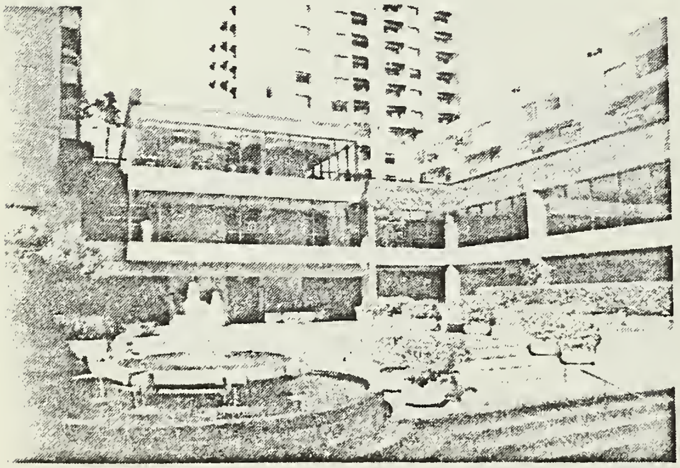
OPERA PLAZA

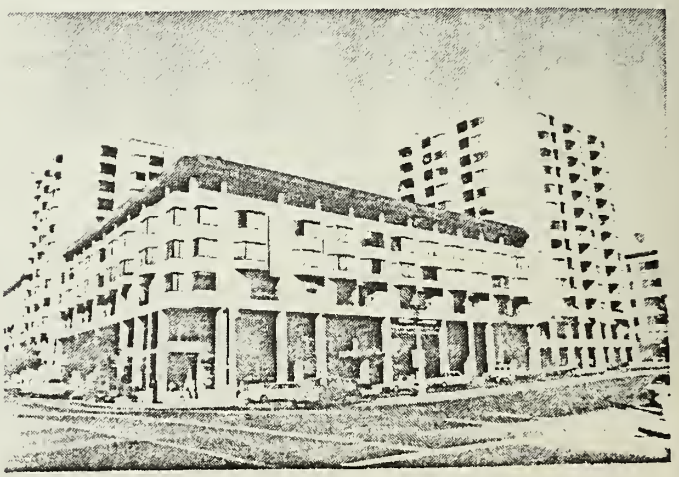


Ground Level Plan



Section



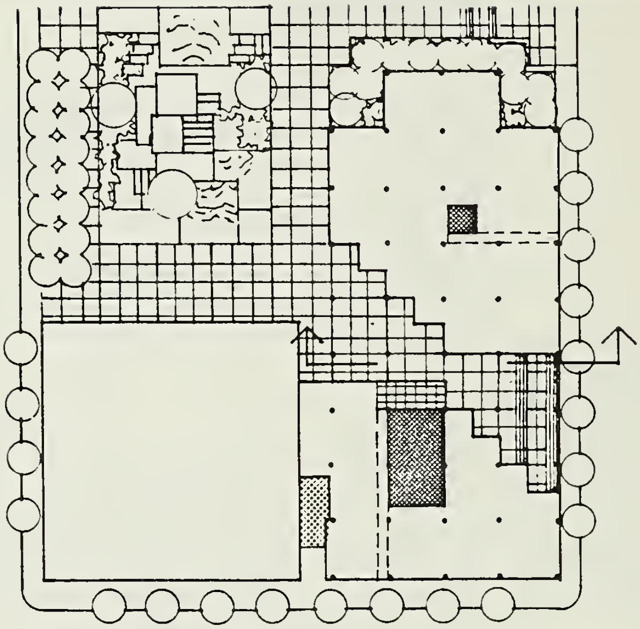


RETAIL USES

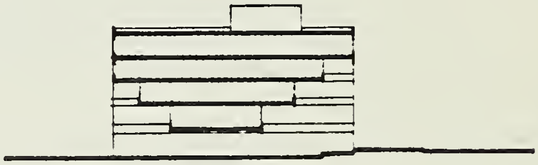
4.1 Small Scale

PROJECT:	**LEVI'S PLAZA** San Francisco, CA
DEVELOPER:	BJEW Associates, San Francisco, CA
ARCHITECT:	Hellmuth, Obata & Kassabaum, Inc.
COMPLETED:	1981
OTHER USES:	Office - 760,000 sf in 4 buildings.
TYPE:	Street frontage.
TENANTS:	Suitable for small tenants.
GROSS SF-RETAIL:	36,000 total. 19,500 (Building B)
Use Sizes:	675 - 7,500
RETAIL FLOORS:	1
FLOOR HEIGHT:	15'-0"
LEASE DEPTHS:	35' - 67'
STORE FRONTAGES:	15' - 110'
ENTRY:	Both Building B and I.S.C. oriented toward central plaza. Entry to Building B shops defined by open passageway from plaza to adjacent street.
HORIZONTAL CIRCULATION:	Continuous around plaza, through passageway, and along street.
PARKING:	On-street metered spaces only. Public parking provided by adjacent projects.
SERVICE:	On-street loading zones.
STRUCTURE:	Steel - 30' x 30' bays.
IMAGE:	
Form:	Articulated low-rise blocks (I.S.C. existing historic block) with stepped retail storefronts.
Materials:	Red brick and grey tinted glass.
Windows:	Ribbon and Punched.
Quality:	Landscaped plaza with fountain creates an attractive organizing element for the retail spaces. Retail primarily serves nearby office employees during workday hours.

LEVI'S PLAZA



Ground Level Plan



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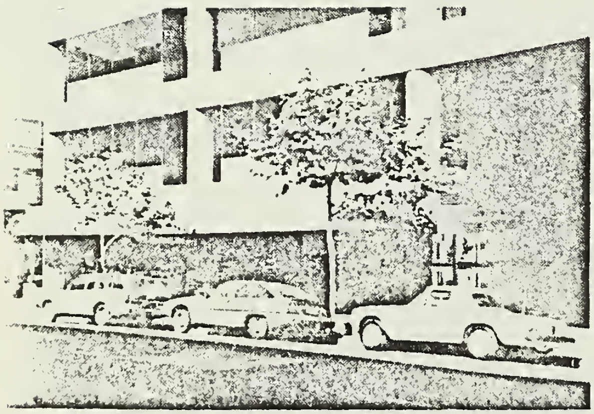
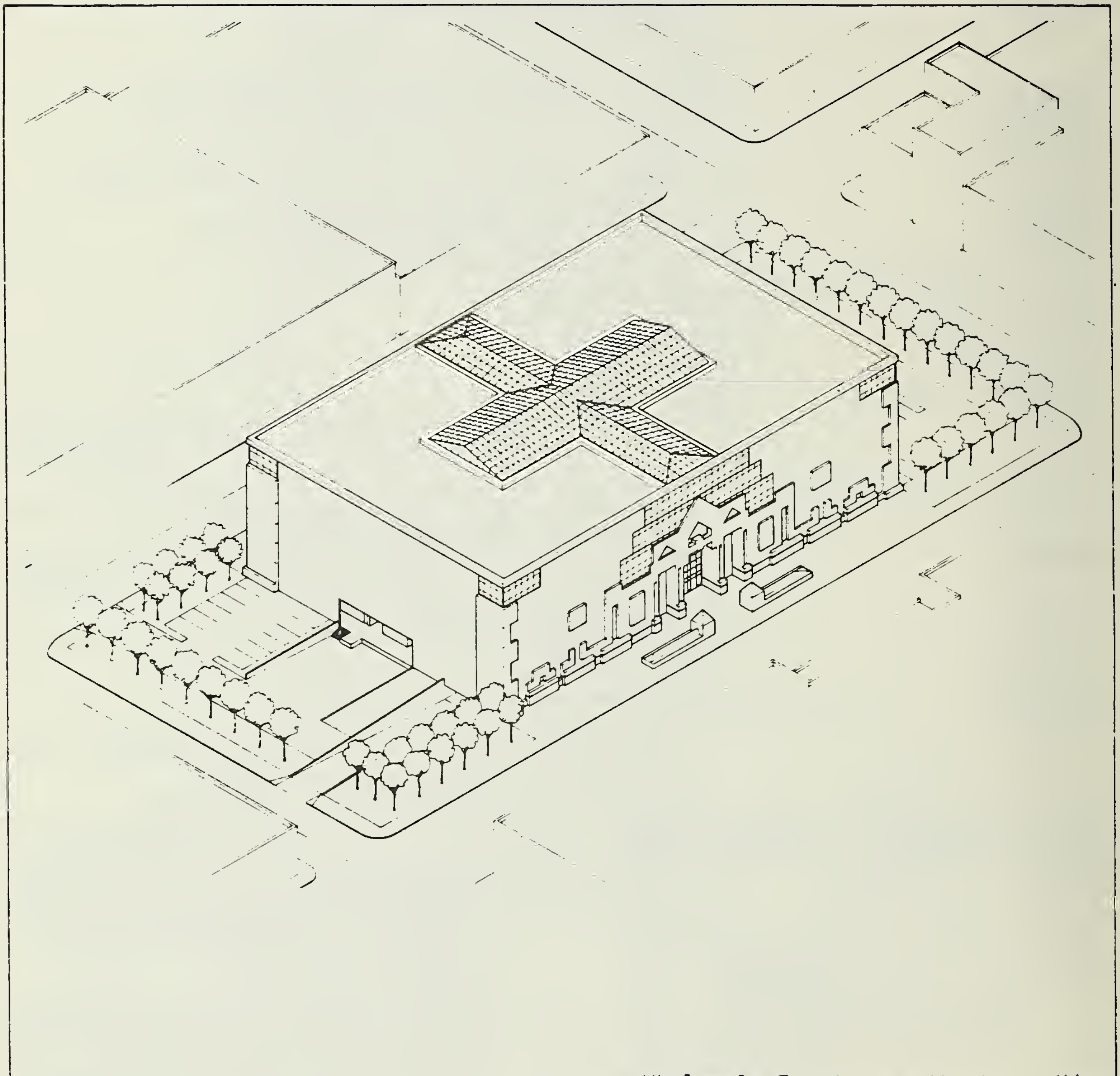


RETAIL USES

4.1 Small Scale

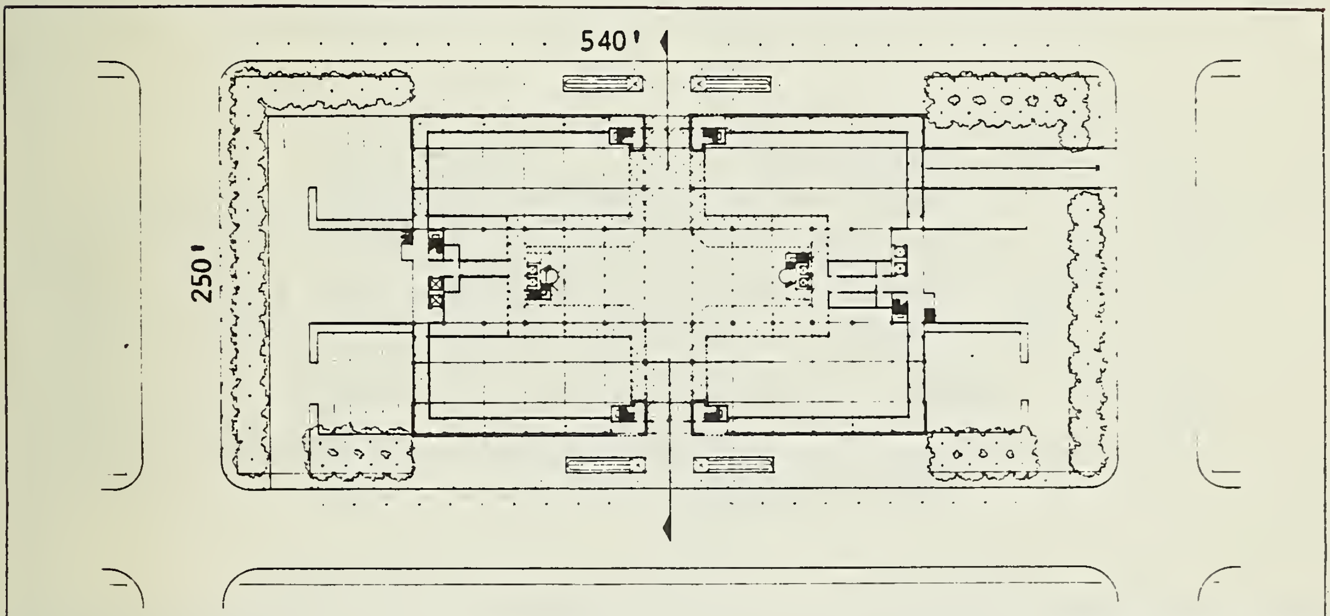
PROJECT:	**CABOT, CABOT AND FORBES** Glendale, CA
DEVELOPER:	Cabot, Cabot and Forbes, Los Angeles, CA
ARCHITECT:	Gensler and Associates, Architects
COMPLETED:	1983
OTHER USES:	Office - 296,000 sf on 11 floors above retail.
TYPE:	Street and courtyard frontage.
TENANTS:	Suitable for small and large tenants.
GROSS SF-RETAIL:	31,000
Use Sizes:	500 - 10,500
RETAIL FLOORS:	1
FLOOR HEIGHT:	16'-0"
LEASE DEPTHS:	24' - 90'
STORE FRONTAGES:	20' - 115'
ENTRY:	2-story archway and stepped facade define major entry. Individual entries from street and courtyard.
HORIZONTAL CIRCULATION:	Continuous around project perimeter and through passage between street and courtyard.
PARKING:	927 spaces on 7 levels in adjacent, above-ground structure. For use by office and retail. 6 short-term on-street spaces.
SERVICE:	Service alley between office building and parking structure.
STRUCTURE:	Steel - 22'-6" x 37'-8" bays.
IMAGE:	
Form:	Unarticulated block with stepped terraces above over-scaled columns at retail base.
Materials:	Blue-grey concrete with blue-grey glass.
Windows:	Ribbon.
Quality:	Entry archway, passage and rear courtyard are pleasant pedestrian ammenities. Street trees compensate in part for lack of street-level arcade.



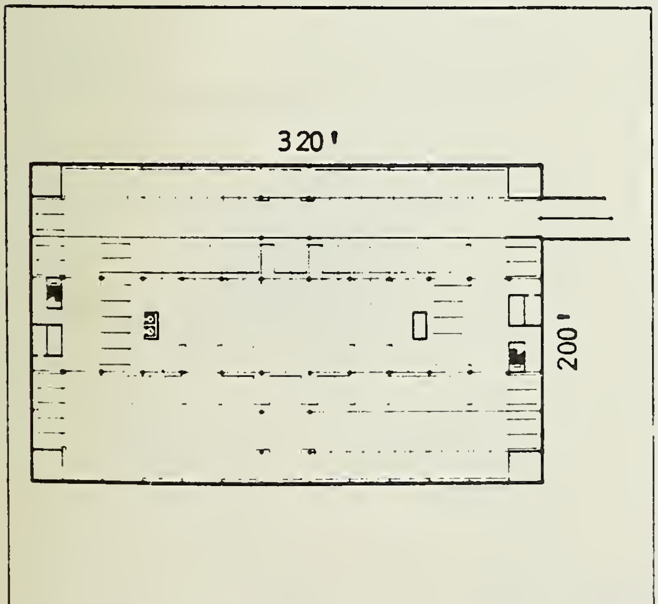
Wholesale Furniture w/Atrium: View

WHOLESALE USES

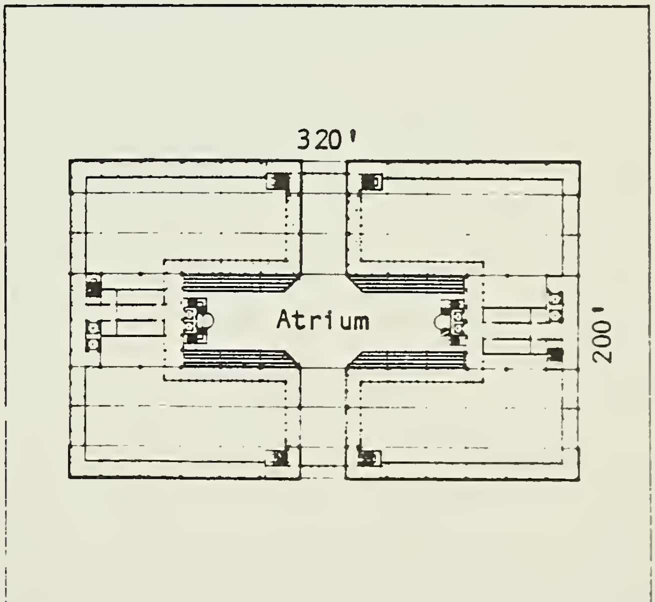
5.1 Wholesale



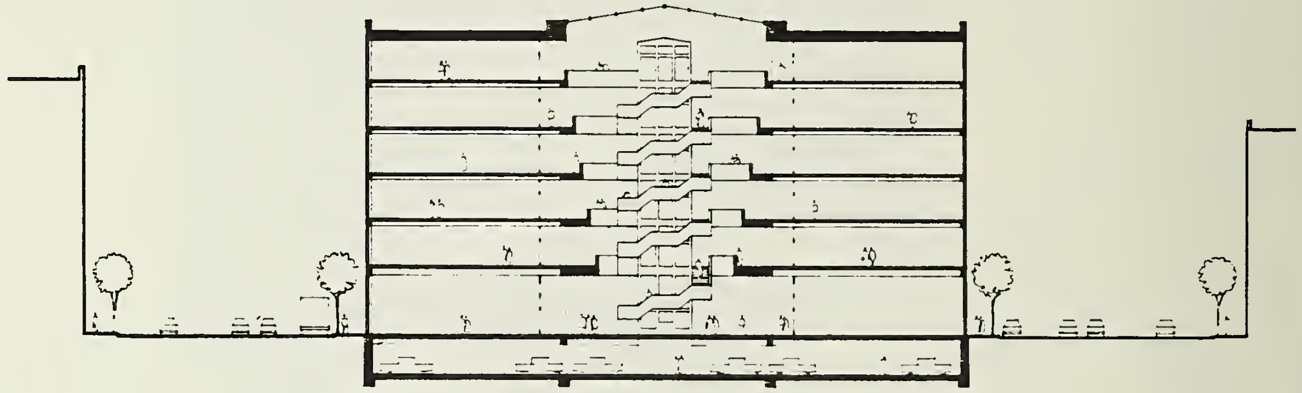
Ground Floor Plan



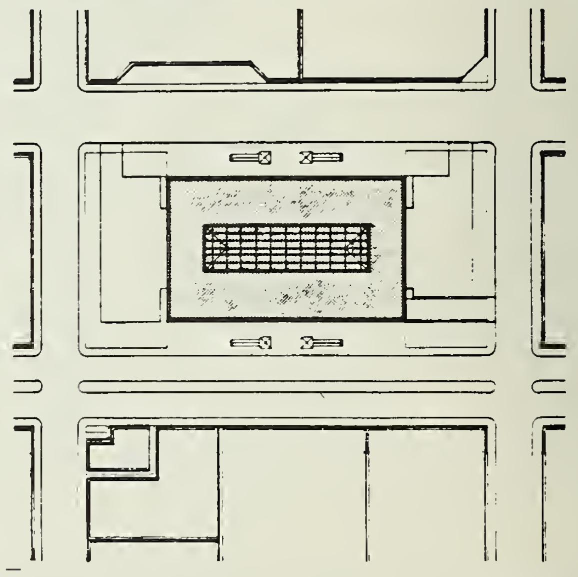
Parking Plan: Below Grade


320'
Atrium
200'

Typical Floor Plan



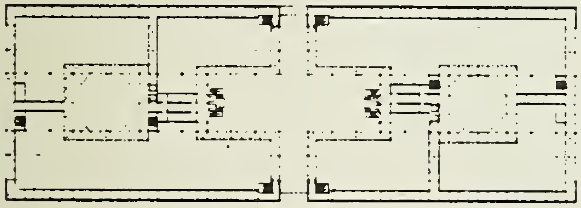
Transverse Section



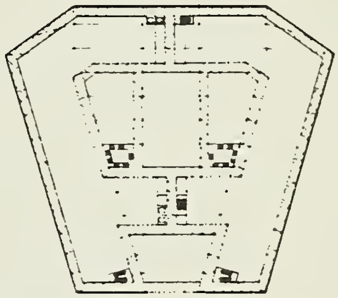
Site Plan

WHOLESALE USES

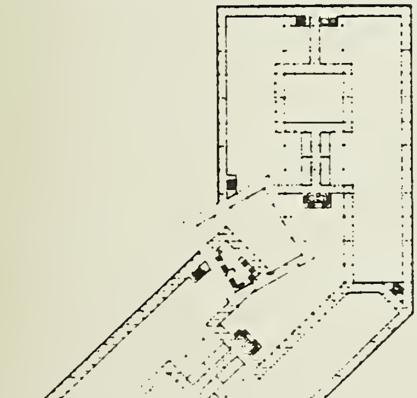
5.1 Wholesale



Floor Plan Variation No. 1



Floor Plan Variation No. 2



Floor Plan Variation No. 3

Buildings are flexible in form within the following parameters:

- 50' ± lease span
- Architecturally interesting detailing
- Unique entry

1501 2

Utica/Omaha, Ne
Houchen
Bindery Ltd
2009